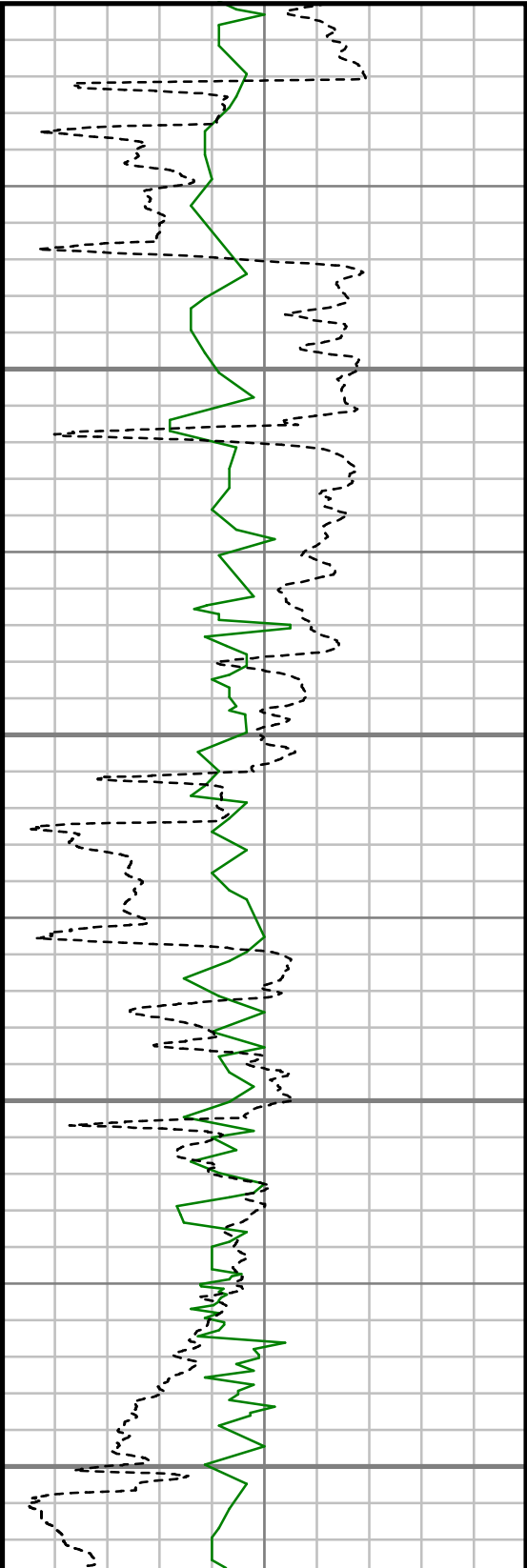
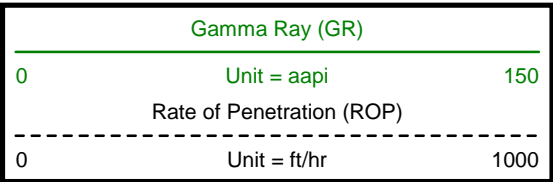


Remarks
BILL BARRETT CORPORATION PRODUCTION AFE# 19407D
SCIENTIFIC DRILLING INTERNATIONAL JOB# 333187
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO HOOKLOAD (MAX) CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO WEIGHT-ON-BIT (SURF,MAX) CURVE
RUN #1: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-328 / CONT = 276 / MWD EYE = 0490 / GAMMA RAY = 1143
BIT TO SENSOR OFFSETS: SURVEY = 63.74 FT. / GAMMA RAY = 60.16 FT.
RUN #2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-328 / CONT = 276 / MWD EYE = 0490 / GAMMA RAY = 1143
BIT TO SENSOR OFFSETS: SURVEY = 59.61 FT. / GAMMA RAY = 56.03 FT.
RUN #3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-186 / CONT = 842 / MWD EYE = 0229 / GAMMA RAY = 1297
BIT TO SENSOR OFFSETS: SURVEY = 57.72 FT. / GAMMA RAY = 49.14 FT.
MNEMONICS LIST:
GR = GAMMA RAY

[illegible]

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions as set out in our current price schedule.

BILL BARRETT CORPORATION
ANSCHUTZ EQUUS FARMS 4-62-9-4956C2
WATTENBERG FIELD
WELD COUNTY, COLORADO
05-123-42156



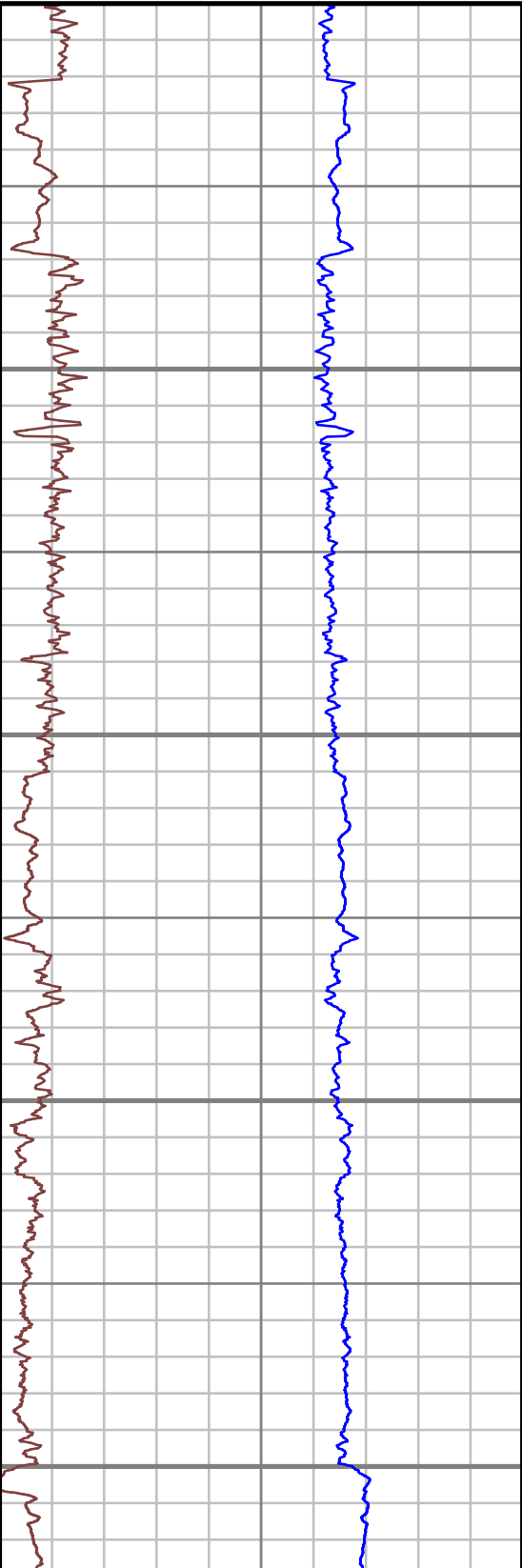
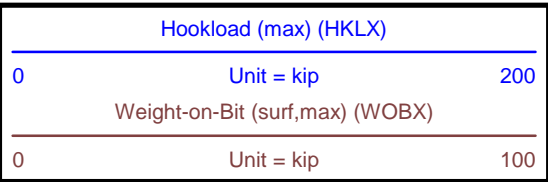
MEASURED DEPTH
1:600 (ft)

4100

4200

4300

4400



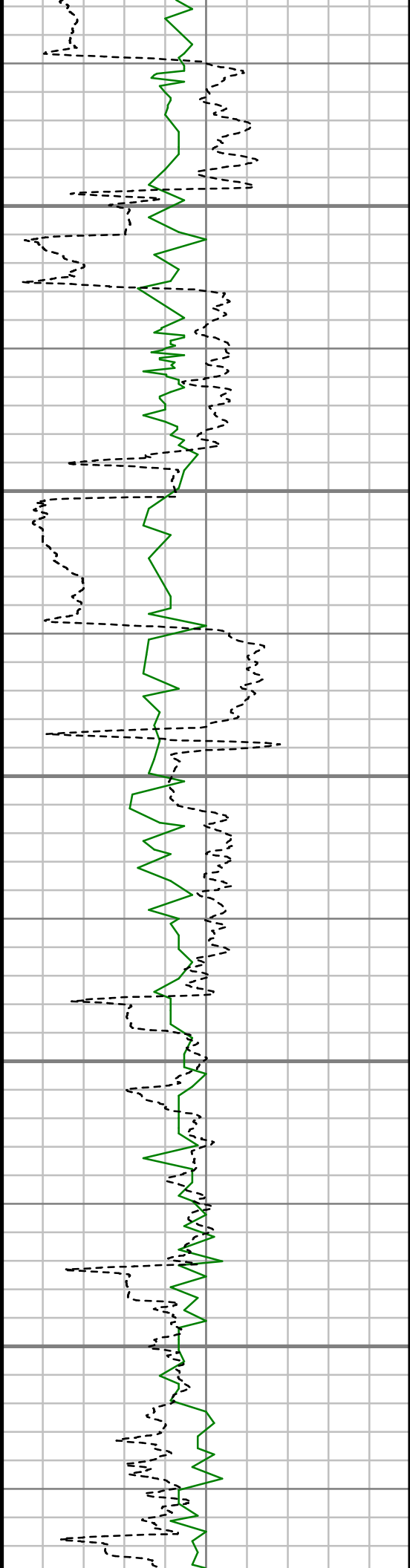
S: 35 MD: 4050.00 ft Inc: 4.48
deg Az: 237.04 deg TVD:
4040.18 ft

S: 36 MD: 4144.00 ft Inc: 3.52
deg Az: 244.77 deg TVD:
4133.95 ft

S: 37 MD: 4239.00 ft Inc: 4.66
deg Az: 250.05 deg TVD:
4228.70 ft

S: 38 MD: 4333.00 ft Inc: 3.34
deg Az: 252.86 deg TVD:
4322.47 ft

Comments



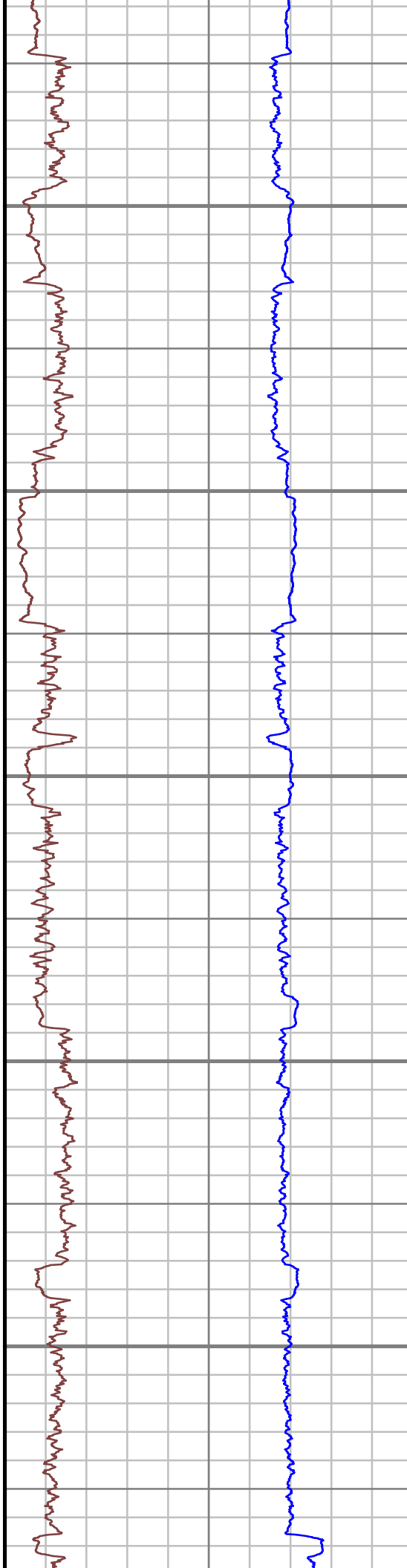
4500

4600

4700

4800

4900



S: 39 MD: 4428.00 ft Inc: 4.04
deg Az: 242.31 deg TVD:
4417.27 ft

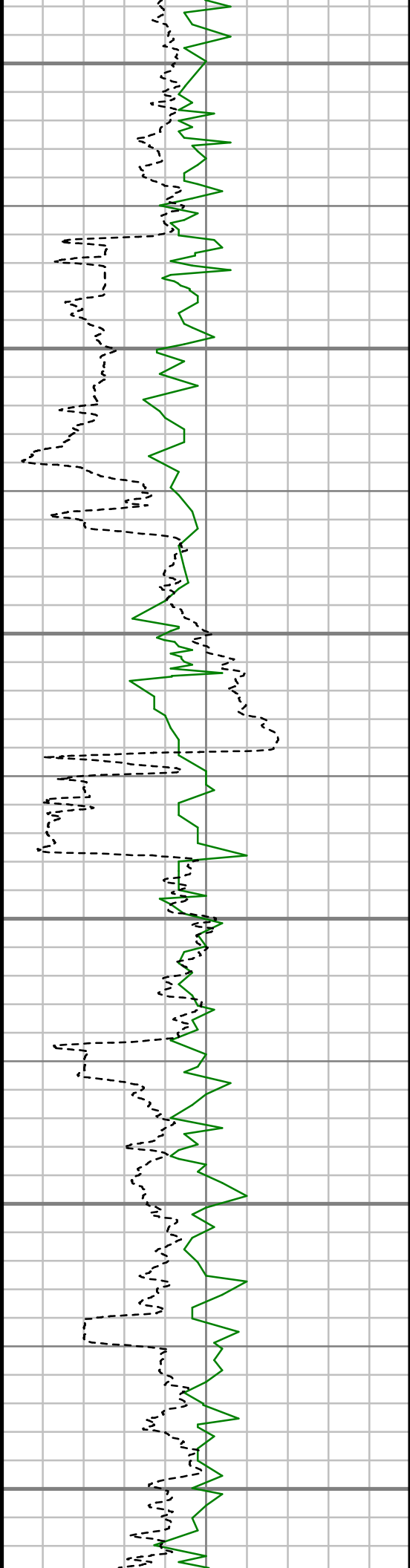
S: 40 MD: 4523.00 ft Inc: 4.84
deg Az: 240.29 deg TVD:
4511.99 ft

S: 41 MD: 4617.00 ft Inc: 5.28
deg Az: 231.41 deg TVD:
4605.62 ft

S: 42 MD: 4711.00 ft Inc: 5.28
deg Az: 222.19 deg TVD:
4699.23 ft

S: 43 MD: 4806.00 ft Inc: 4.31
deg Az: 212.25 deg TVD:
4793.90 ft

S: 44 MD: 4900.00 ft Inc: 3.34
deg Az: 215.42 deg TVD:
4887.69 ft



5000

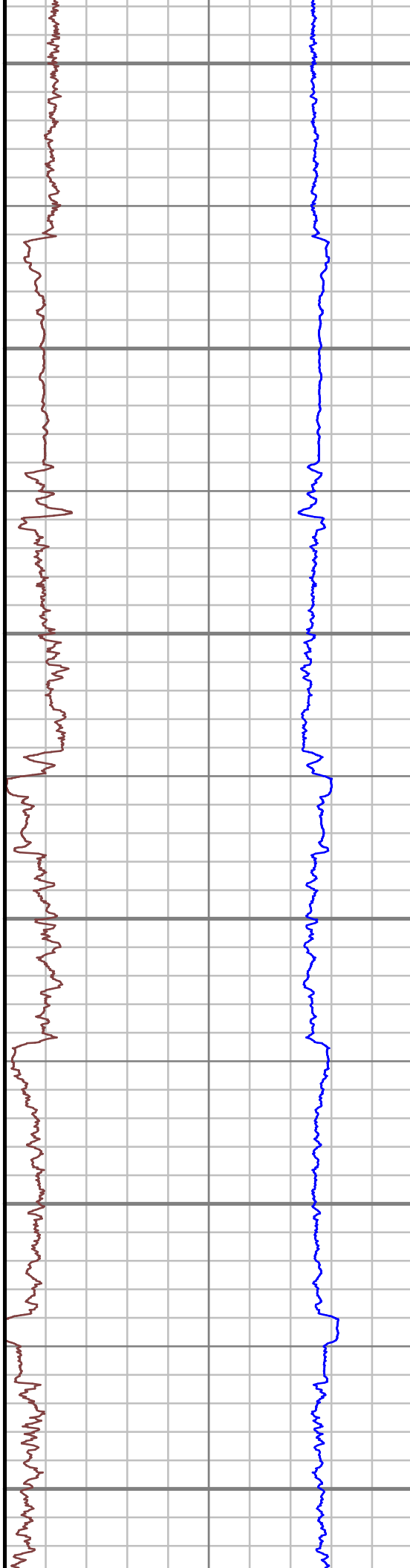
5100

5200

5300

5400

5500



S: 45 MD: 4994.00 ft Inc: 2.37
deg Az: 203.55 deg TVD:
4981.57 ft

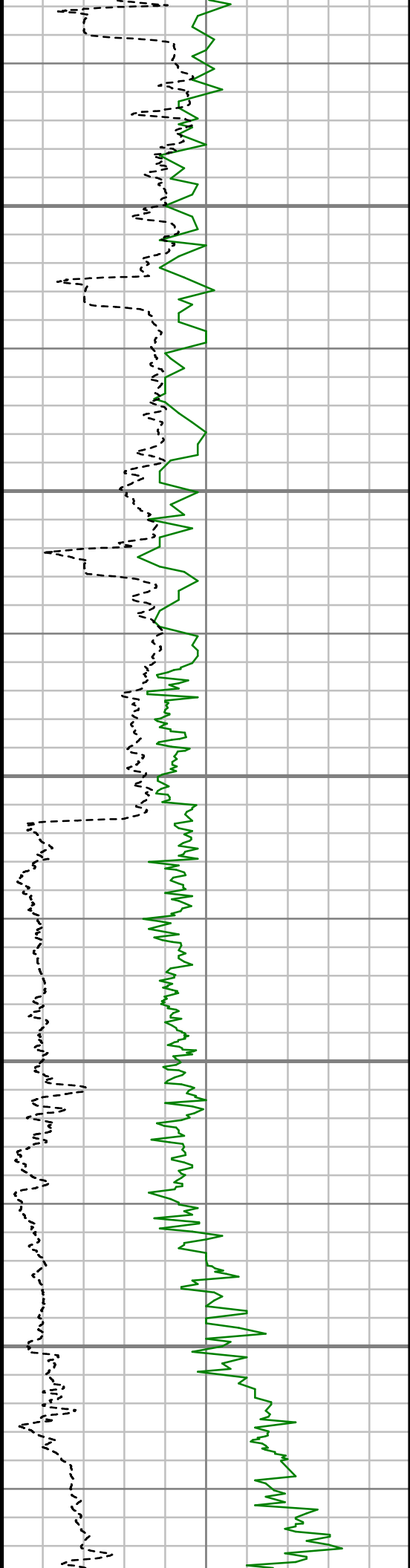
S: 46 MD: 5088.00 ft Inc: 2.11
deg Az: 196.79 deg TVD:
5075.50 ft

S: 47 MD: 5183.00 ft Inc: 1.67
deg Az: 196.43 deg TVD:
5170.44 ft

S: 48 MD: 5278.00 ft Inc: 0.70
deg Az: 119.88 deg TVD:
5265.43 ft

S: 49 MD: 5372.00 ft Inc: 0.70
deg Az: 142.38 deg TVD:
5359.42 ft

S: 50 MD: 5467.00 ft Inc: 0.62
deg Az: 152.14 deg TVD:
5454.41 ft



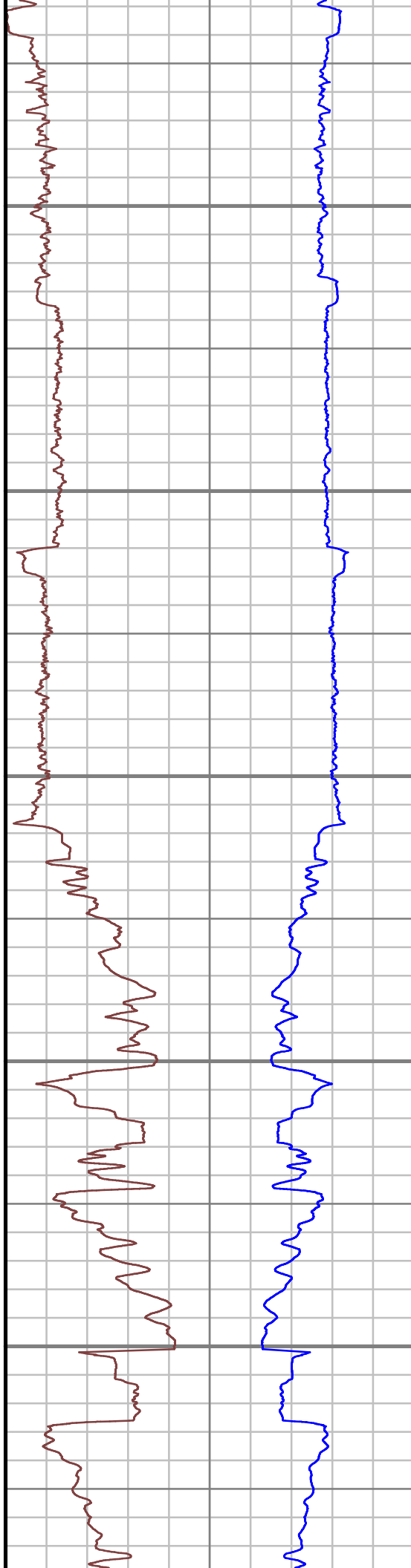
5600

5700

5800

5900

6000



S: 51 MD: 5561.00 ft Inc: 0.18
deg Az: 145.02 deg TVD:
5548.41 ft

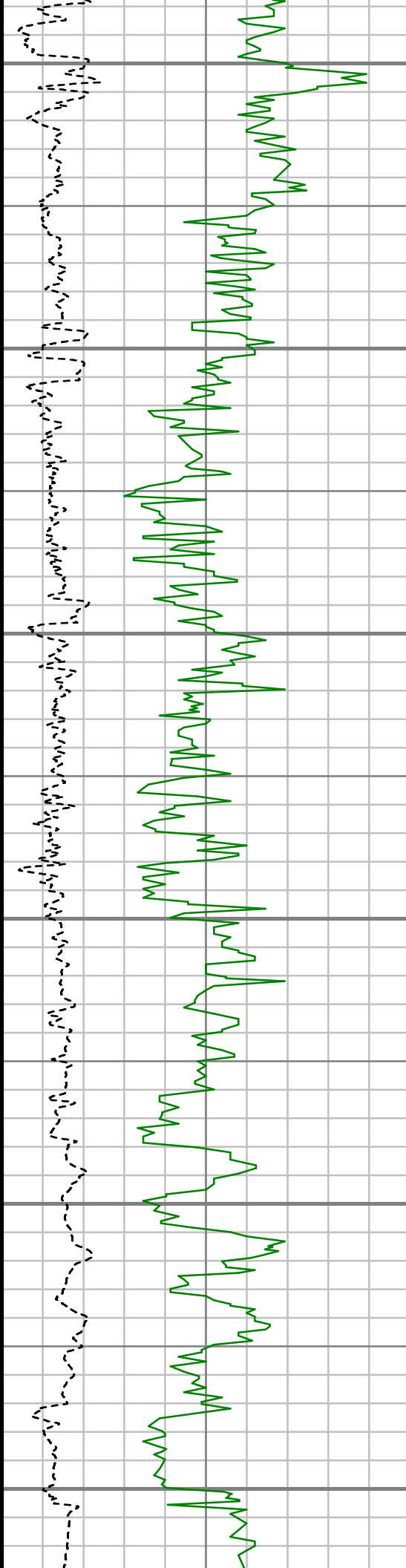
S: 52 MD: 5656.00 ft Inc: 0.44
deg Az: 179.65 deg TVD:
5643.41 ft

S: 53 MD: 5750.00 ft Inc: 0.26
deg Az: 189.93 deg TVD:
5737.41 ft

S: 54 MD: 5845.00 ft Inc: 2.81
deg Az: 88.50 deg TVD:
5832.37 ft

S: 55 MD: 5940.00 ft Inc: 11.78
deg Az: 89.03 deg TVD:
5926.51 ft

S: 56 MD: 6035.00 ft Inc: 21.63
deg Az: 81.91 deg TVD:
6017.39 ft



6100

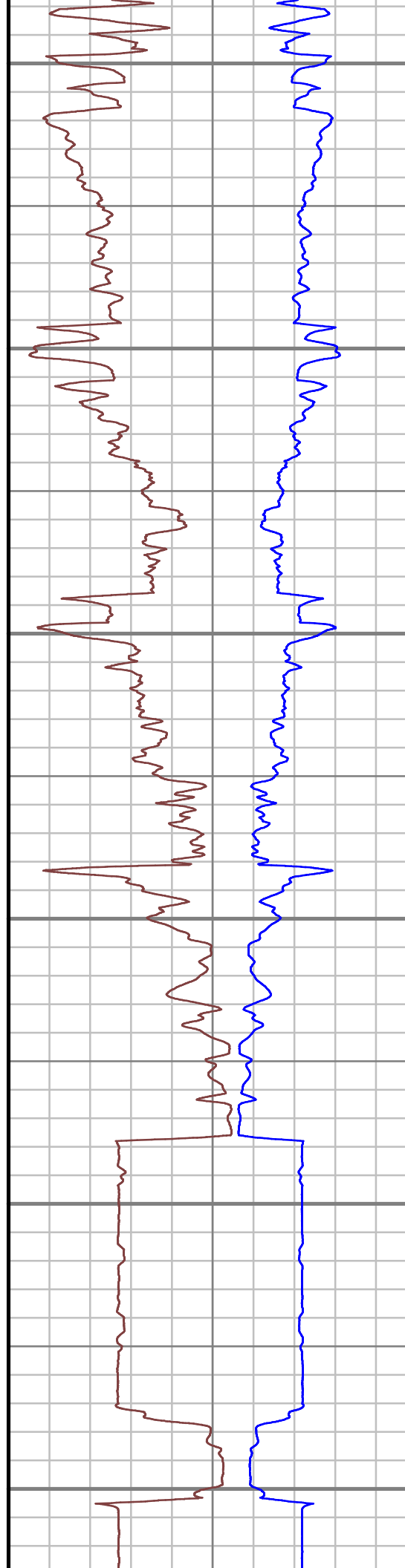
6200

6300

6400

6500

6600



S: 57 MD: 6129.00 ft Inc: 32.45
deg Az: 84.81 deg TVD:
6101.00 ft

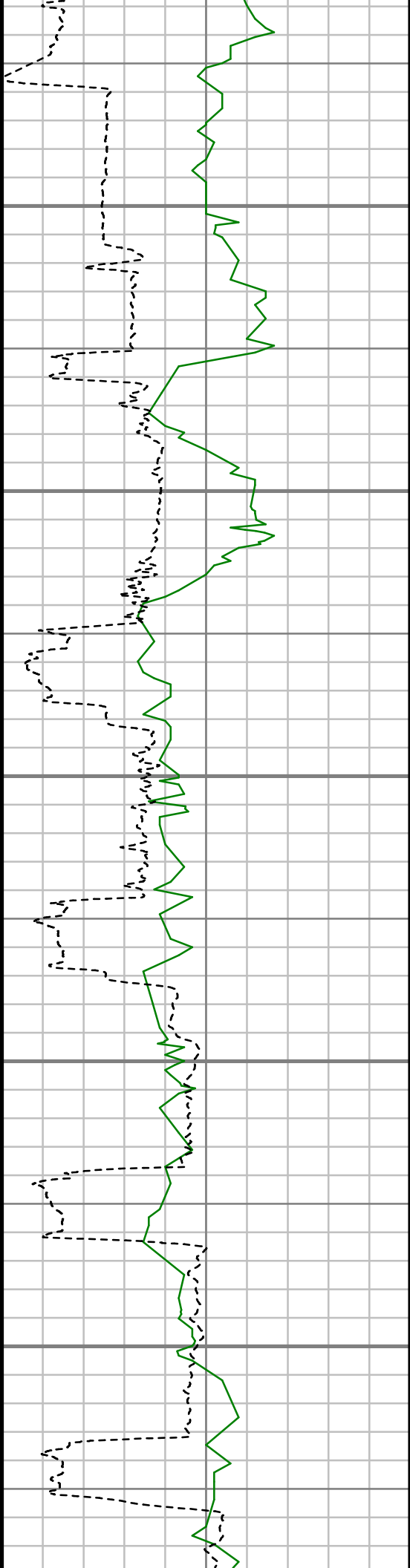
S: 58 MD: 6224.00 ft Inc: 42.30
deg Az: 85.96 deg TVD:
6176.40 ft

S: 59 MD: 6319.00 ft Inc: 55.05
deg Az: 88.68 deg TVD:
6239.02 ft

S: 60 MD: 6413.00 ft Inc: 72.63
deg Az: 89.91 deg TVD:
6280.30 ft

S: 61 MD: 6507.00 ft Inc: 84.06
deg Az: 92.37 deg TVD:
6299.25 ft

S: 62 MD: 6567.00 ft Inc: 85.30
deg Az: 92.28 deg TVD:
6304.81 ft



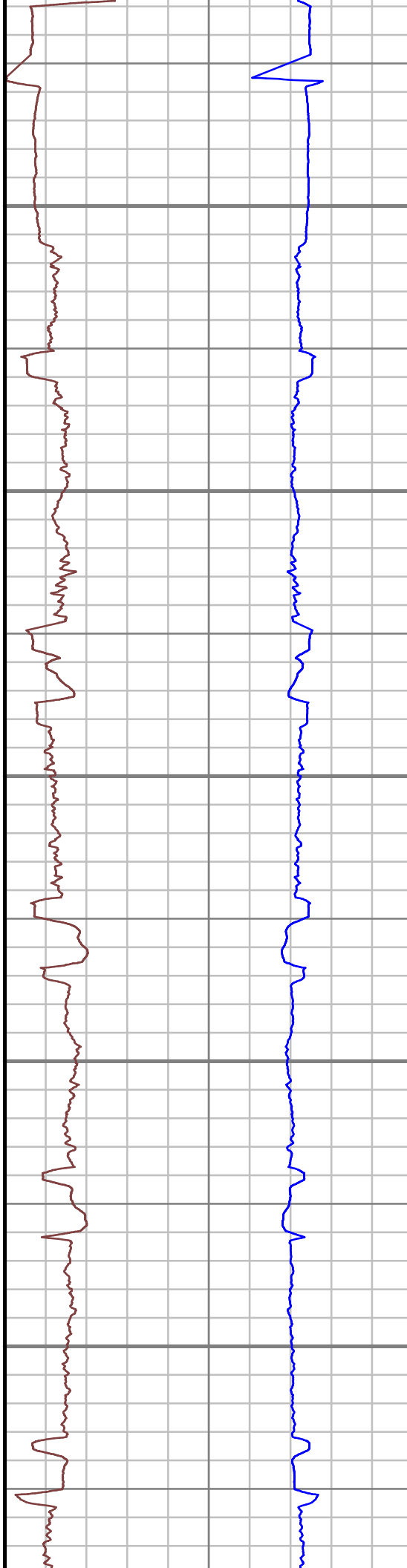
6700

6800

6900

7000

7100



S: 63 MD: 6693.00 ft Inc: 90.75
deg Az: 92.20 deg TVD:
6309.16 ft

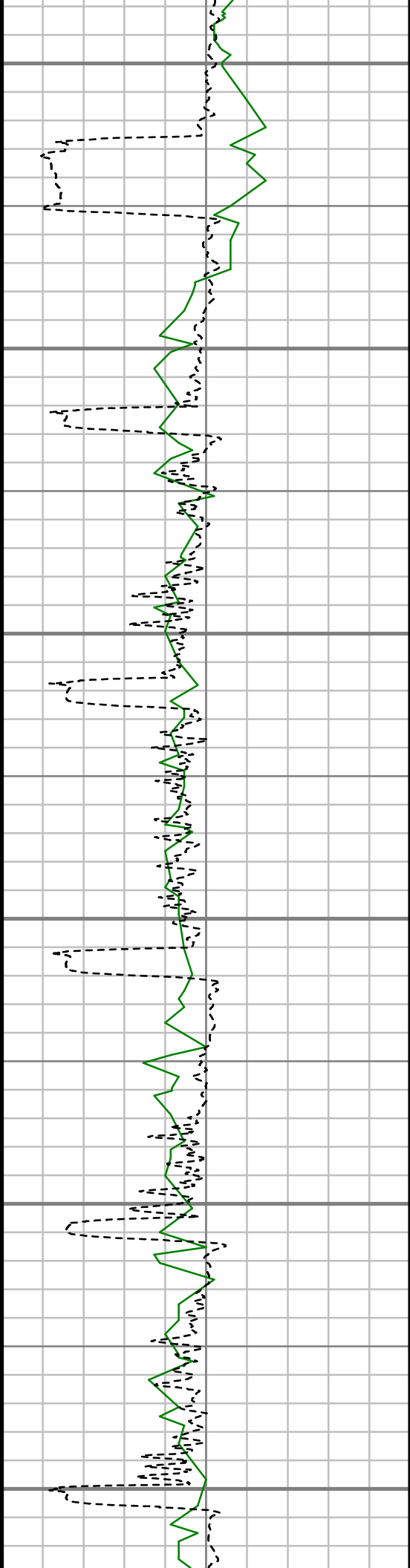
S: 64 MD: 6788.00 ft Inc: 91.10
deg Az: 91.93 deg TVD:
6307.63 ft

S: 65 MD: 6883.00 ft Inc: 91.63
deg Az: 90.09 deg TVD:
6305.37 ft

S: 66 MD: 6977.00 ft Inc: 91.01
deg Az: 90.09 deg TVD:
6303.21 ft

S: 67 MD: 7071.00 ft Inc: 90.22
deg Az: 89.65 deg TVD:
6302.20 ft

S: 68 MD: 7166.00 ft Inc: 90.84
deg Az: 90.00 deg TVD:



7200

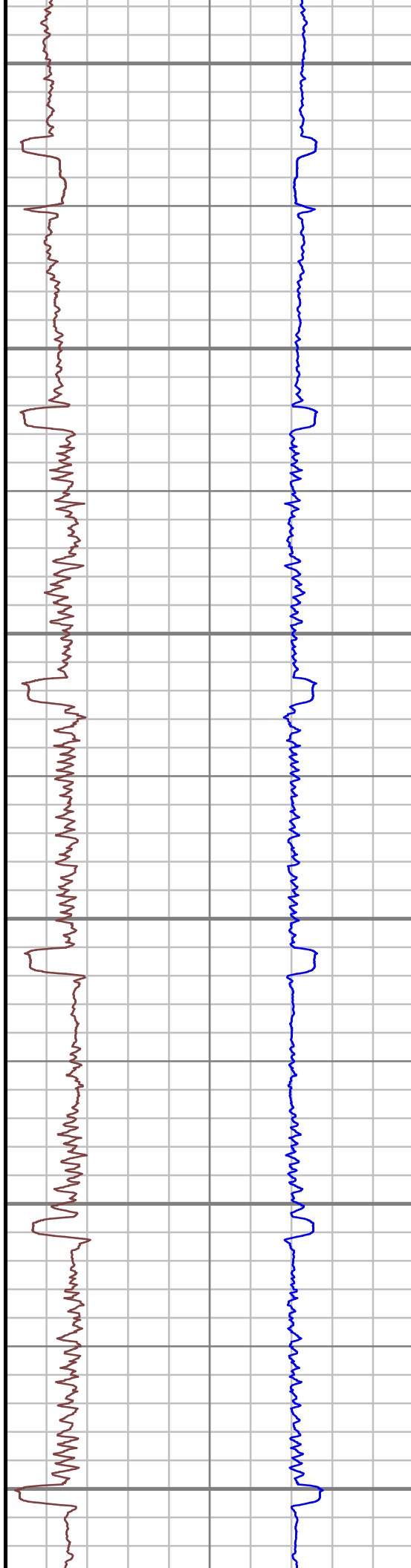
7300

7400

7500

7600

7700



6301.32 ft

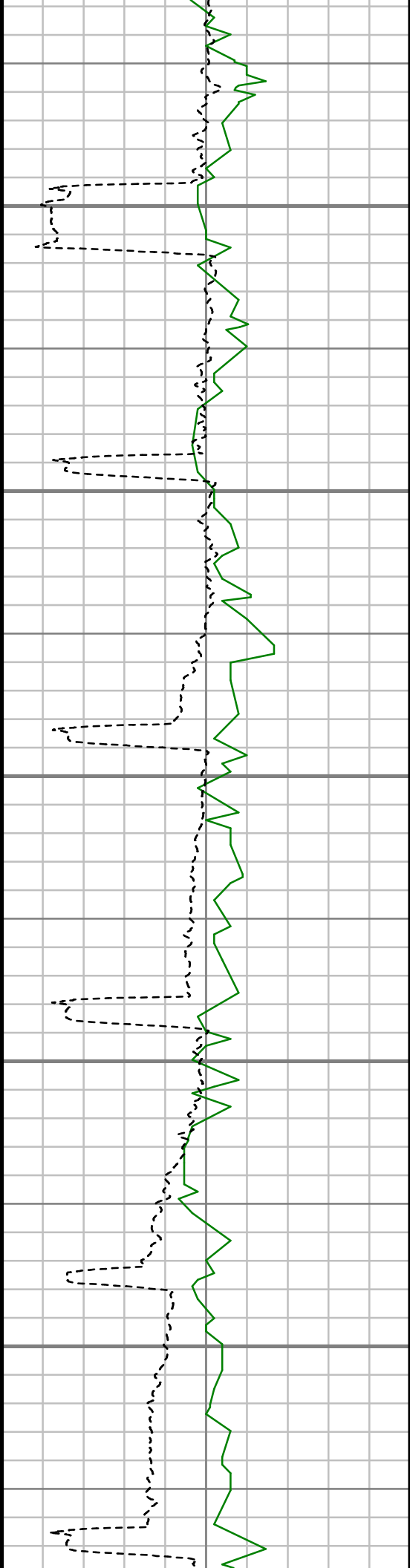
S: 69 MD: 7260.00 ft Inc: 89.34
deg Az: 88.24 deg TVD:
6301.18 ft

S: 70 MD: 7355.00 ft Inc: 89.69
deg Az: 88.15 deg TVD:
6301.98 ft

S: 71 MD: 7449.00 ft Inc: 90.22
deg Az: 88.50 deg TVD:
6302.05 ft

S: 72 MD: 7544.00 ft Inc: 90.13
deg Az: 88.15 deg TVD:
6301.76 ft

S: 73 MD: 7638.00 ft Inc: 90.75
deg Az: 89.03 deg TVD:
6301.04 ft



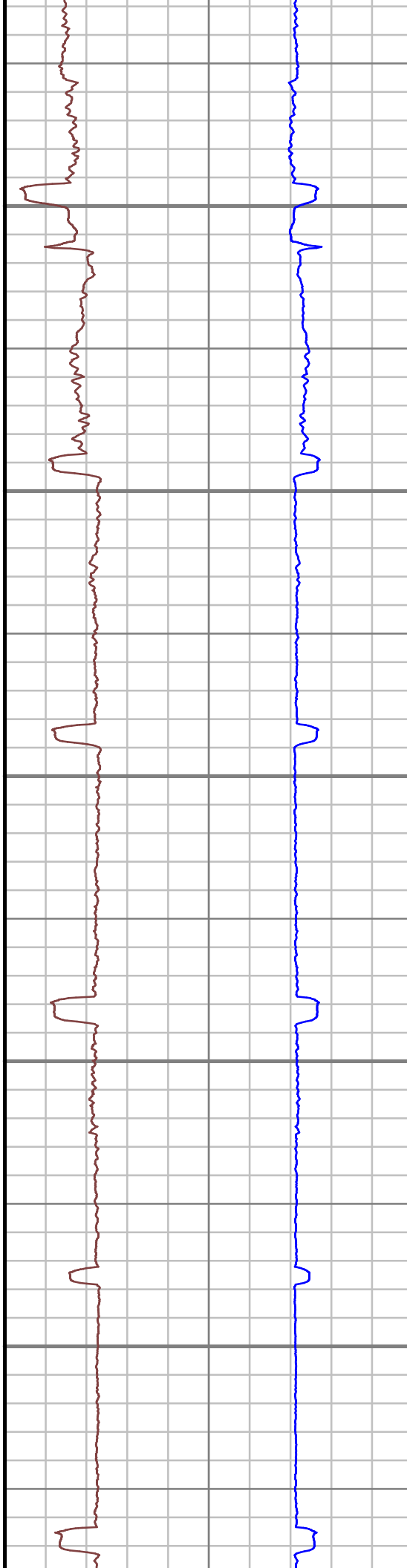
7800

7900

8000

8100

8200



S: 74 MD: 7732.00 ft Inc: 91.28
deg Az: 88.77 deg TVD:
6299.38 ft

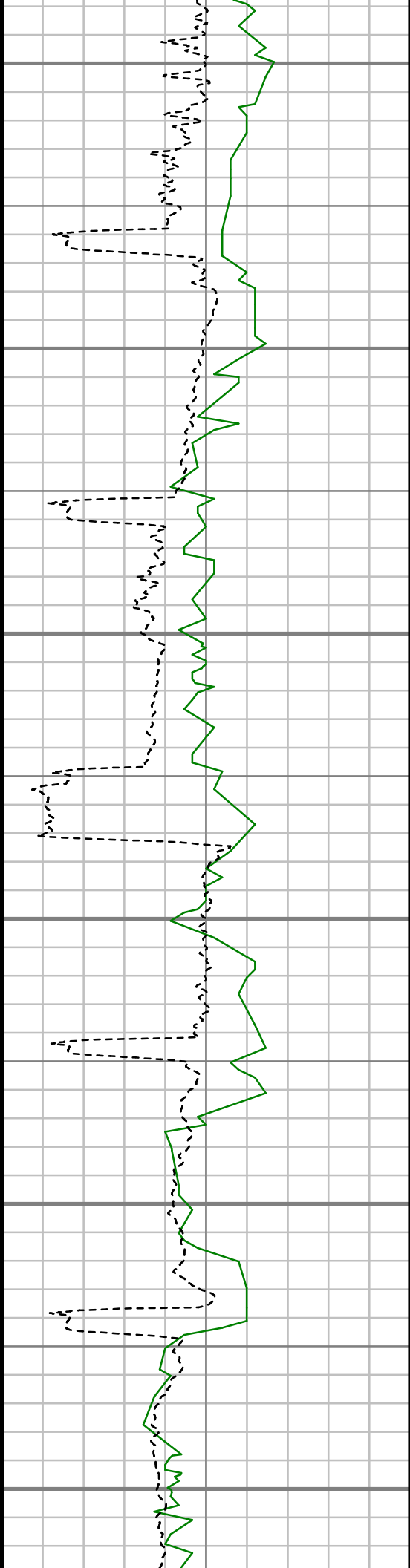
S: 75 MD: 7827.00 ft Inc: 89.60
deg Az: 88.15 deg TVD:
6298.65 ft

S: 76 MD: 7920.00 ft Inc: 90.22
deg Az: 88.59 deg TVD:
6298.80 ft

S: 77 MD: 8015.00 ft Inc: 90.04
deg Az: 88.33 deg TVD:
6298.58 ft

S: 78 MD: 8110.00 ft Inc: 90.40
deg Az: 89.21 deg TVD:
6298.21 ft

S: 79 MD: 8204.00 ft Inc: 90.04
deg Az: 88.86 deg TVD:
6297.85 ft



8300

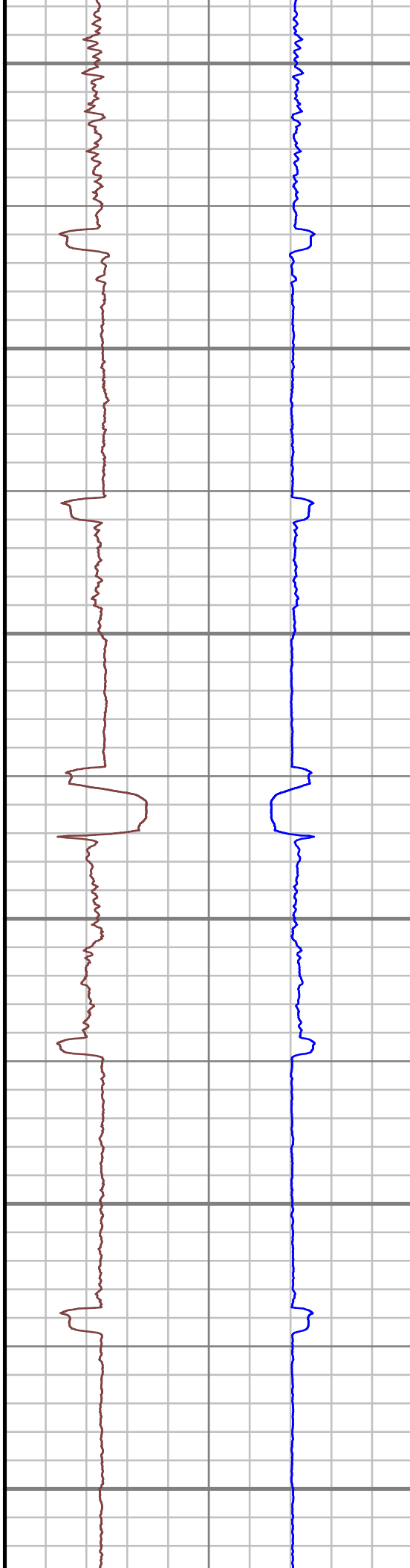
8400

8500

8600

8700

8800



S: 80 MD: 8298.00 ft Inc: 90.66
deg Az: 89.03 deg TVD:
6297.27 ft

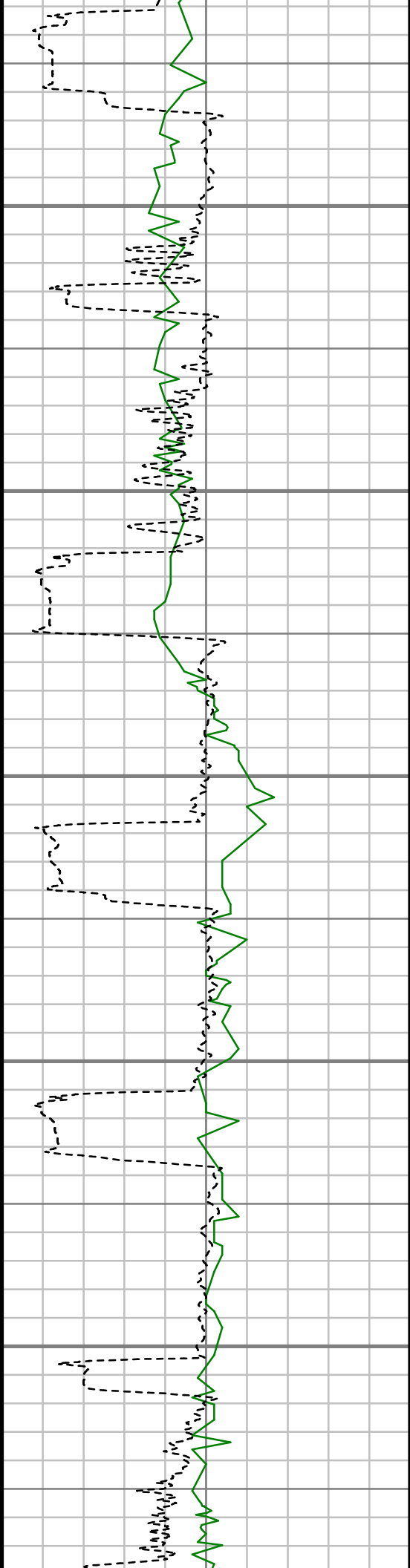
S: 81 MD: 8393.00 ft Inc: 90.04
deg Az: 87.89 deg TVD:
6296.69 ft

S: 82 MD: 8486.00 ft Inc: 89.87
deg Az: 88.24 deg TVD:
6296.76 ft

S: 83 MD: 8580.00 ft Inc: 90.40
deg Az: 89.65 deg TVD:
6296.55 ft

S: 84 MD: 8675.00 ft Inc: 91.45
deg Az: 90.61 deg TVD:
6295.02 ft

S: 85 MD: 8769.00 ft Inc: 92.07
deg Az: 91.32 deg TVD:
6292.13 ft



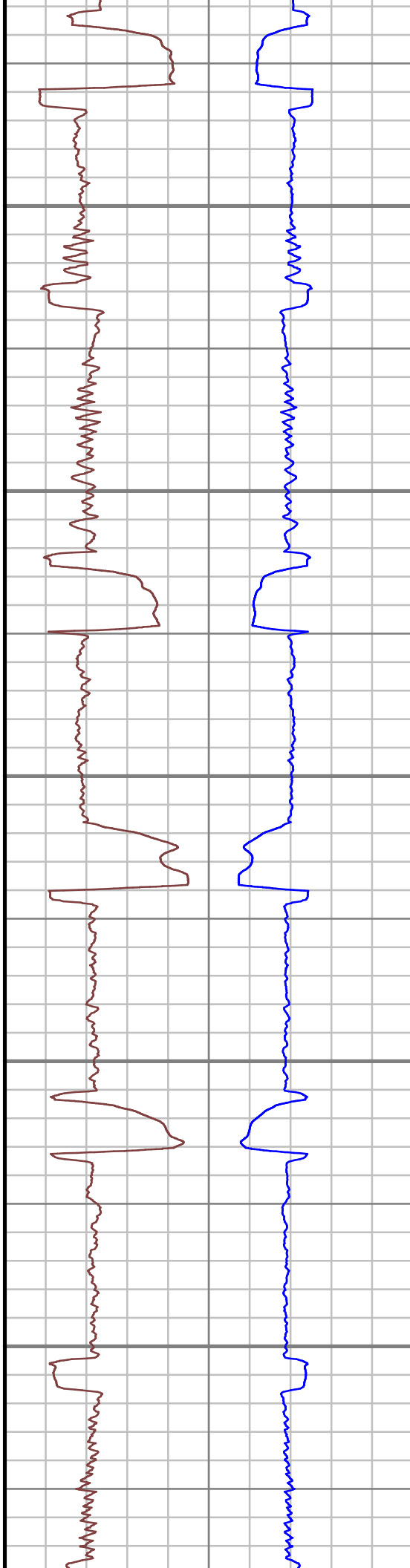
8900

9000

9100

9200

9300



S: 86 MD: 8864.00 ft Inc: 90.40
deg Az: 91.32 deg TVD:
6290.09 ft

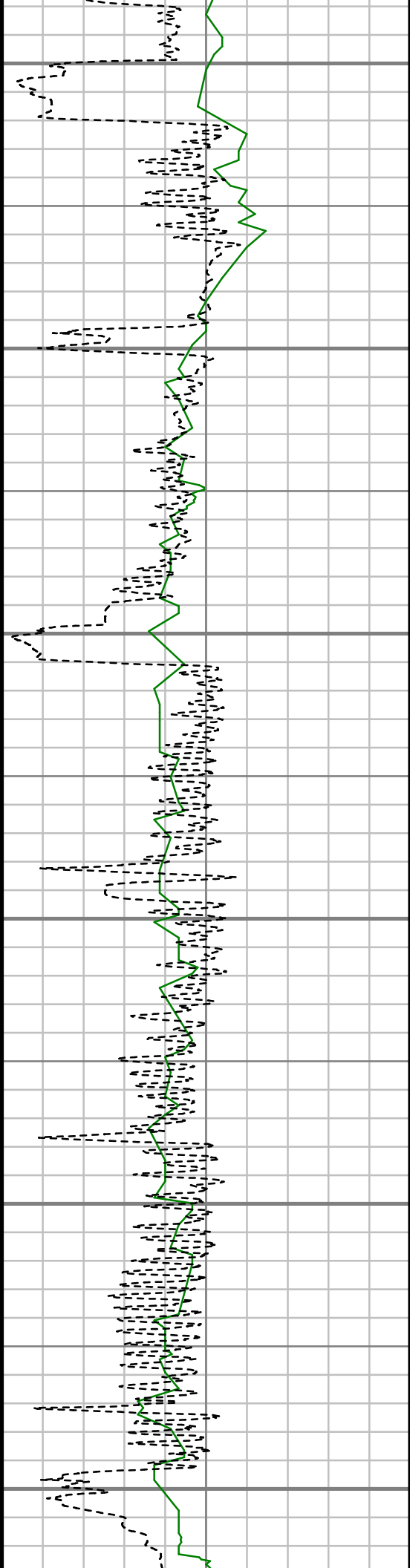
S: 87 MD: 8958.00 ft Inc: 91.28
deg Az: 91.93 deg TVD:
6288.72 ft

S: 88 MD: 9052.00 ft Inc: 91.10
deg Az: 90.09 deg TVD:
6286.77 ft

S: 89 MD: 9147.00 ft Inc: 90.48
deg Az: 89.38 deg TVD:
6285.46 ft

S: 90 MD: 9243.00 ft Inc: 89.69
deg Az: 89.03 deg TVD:
6285.31 ft

S: 91 MD: 9337.00 ft Inc: 90.22
deg Az: 89.21 deg TVD:
6285.38 ft



9400

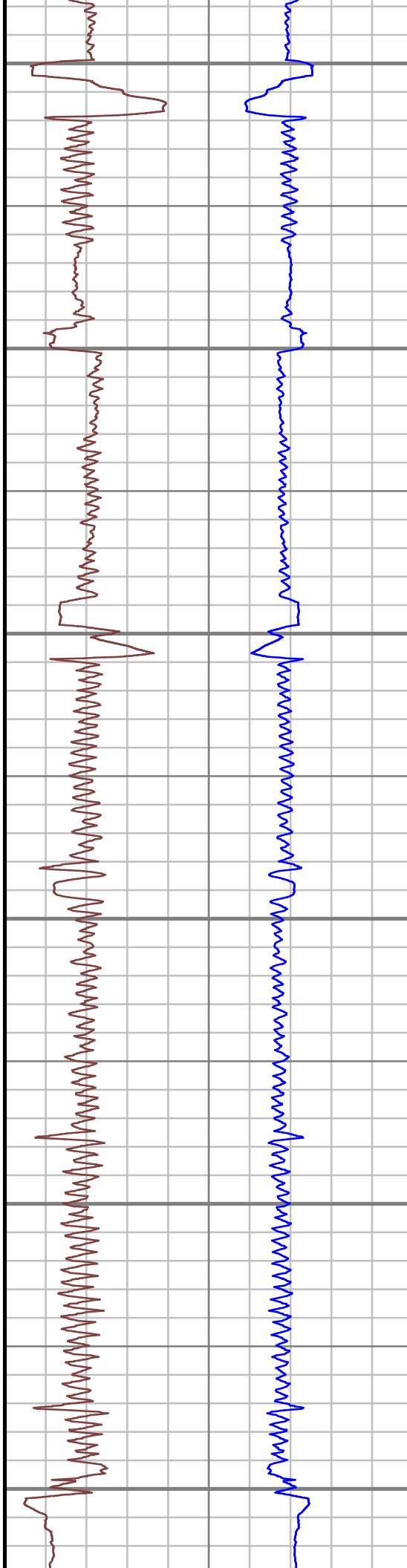
9500

9600

9700

9800

9900



S: 92 MD: 9431.00 ft Inc: 88.99
deg Az: 88.50 deg TVD:
6286.03 ft

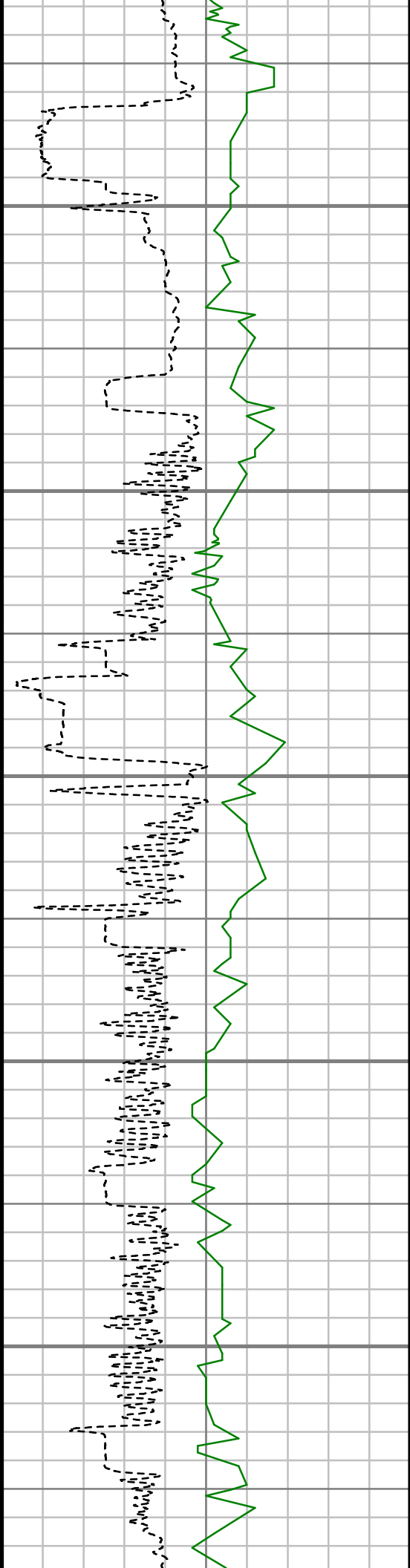
S: 93 MD: 9525.00 ft Inc: 88.99
deg Az: 88.68 deg TVD:
6287.69 ft

S: 94 MD: 9620.00 ft Inc: 90.31
deg Az: 88.06 deg TVD:
6288.28 ft

S: 95 MD: 9715.00 ft Inc: 90.75
deg Az: 88.94 deg TVD:
6287.40 ft

S: 96 MD: 9810.00 ft Inc: 90.75
deg Az: 88.77 deg TVD:
6286.16 ft

S: 97 MD: 9904.00 ft Inc: 91.01
deg Az: 88.50 deg TVD:
6284.72 ft



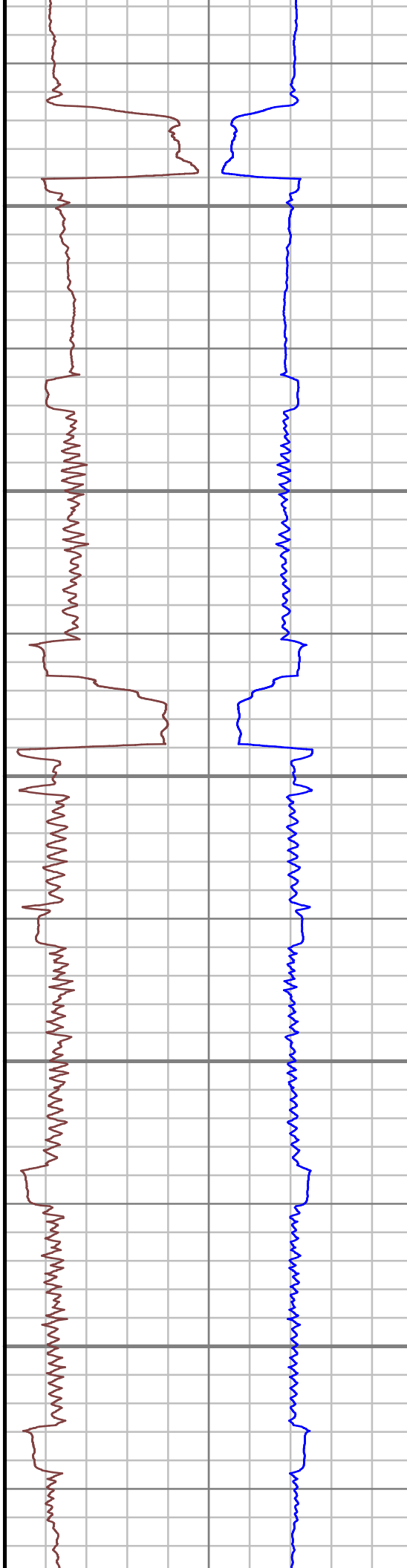
10000

10100

10200

10300

10400



S: 98 MD: 9998.00 ft Inc: 90.22
deg Az: 87.36 deg TVD:
6283.71 ft

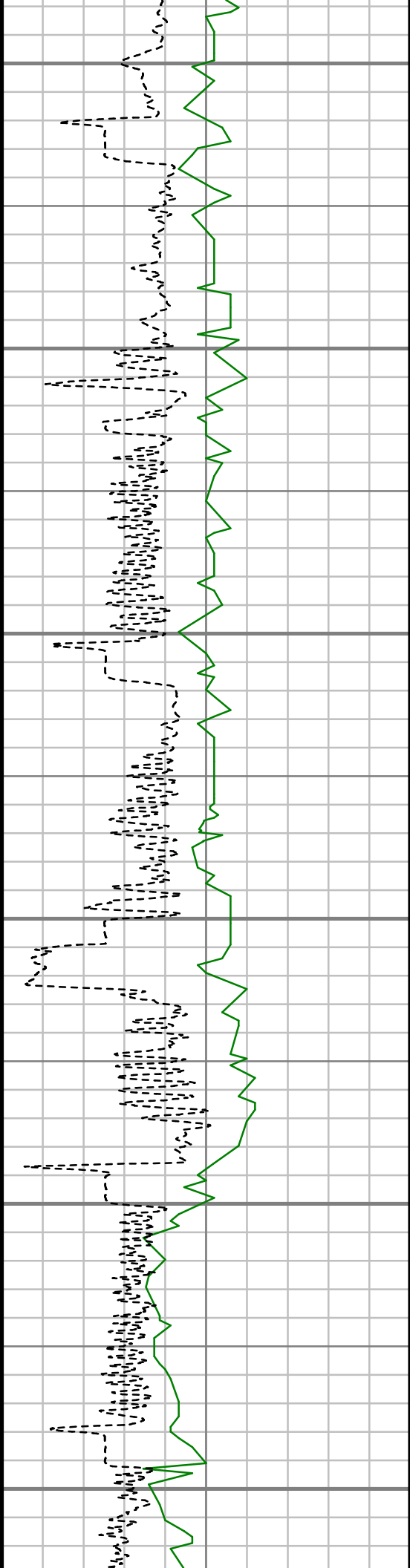
S: 99 MD: 10093.00 ft Inc:
89.60 deg Az: 86.66 deg TVD:
6283.86 ft

S: 100 MD: 10185.00 ft Inc:
90.84 deg Az: 90.26 deg TVD:
6283.50 ft

S: 101 MD: 10276.00 ft Inc:
90.75 deg Az: 89.91 deg TVD:
6282.25 ft

S: 102 MD: 10368.00 ft Inc:
89.69 deg Az: 88.86 deg TVD:
6281.89 ft

S: 103 MD: 10460.00 ft Inc:
90.66 deg Az: 88.77 deg TVD:
6281.61 ft



10500

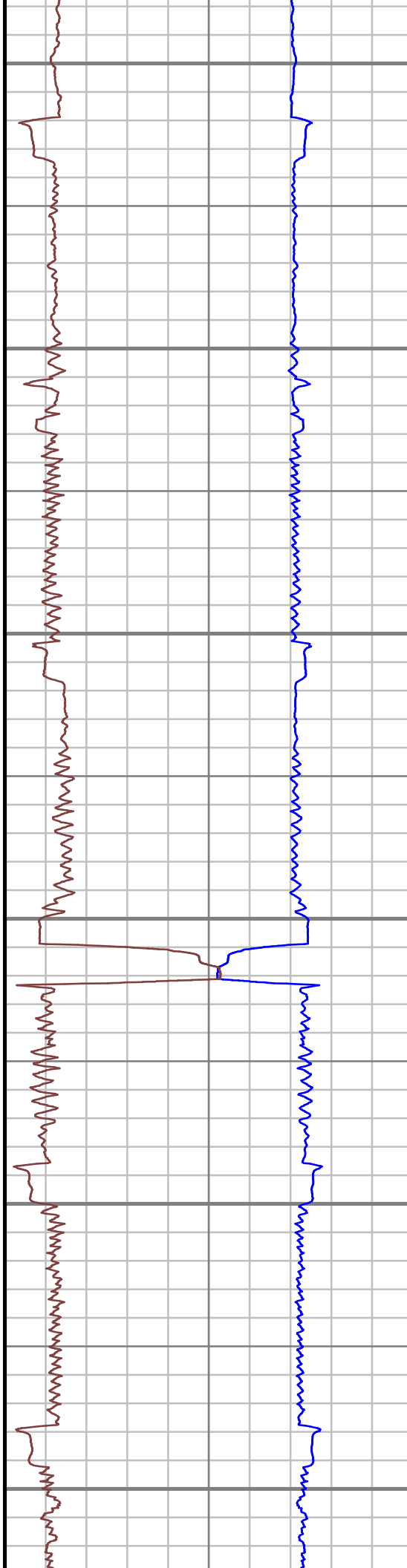
10600

10700

10800

10900

11000



S: 104 MD: 10551.00 ft Inc:
90.48 deg Az: 88.15 deg TVD:
6280.70 ft

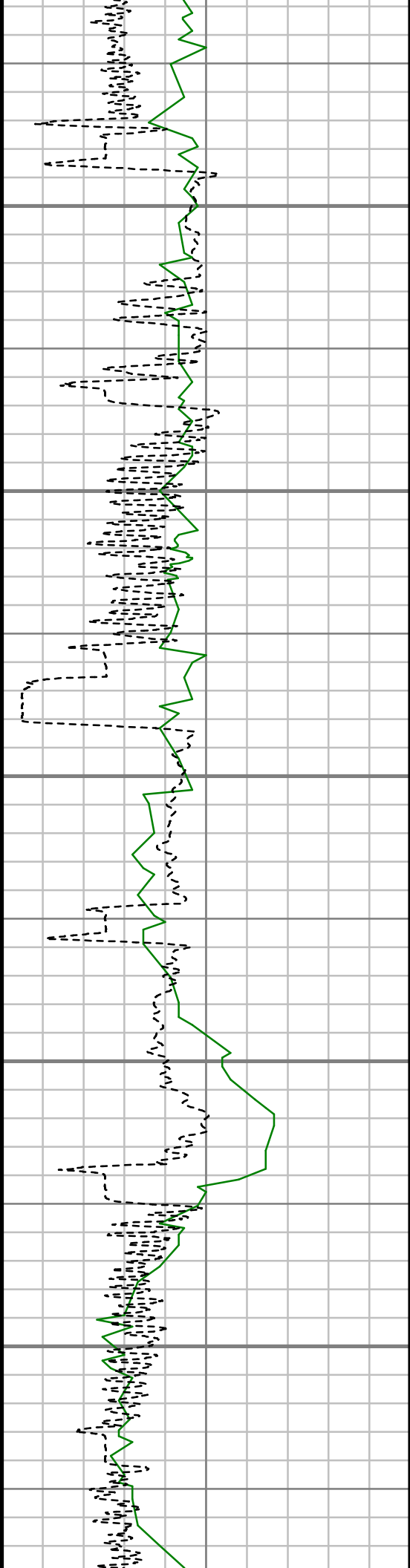
S: 105 MD: 10643.00 ft Inc:
90.66 deg Az: 87.80 deg TVD:
6279.78 ft

S: 106 MD: 10734.00 ft Inc:
91.19 deg Az: 88.33 deg TVD:
6278.32 ft

S: 107 MD: 10826.00 ft Inc:
89.87 deg Az: 88.50 deg TVD:
6277.47 ft

S: 108 MD: 10918.00 ft Inc:
89.87 deg Az: 89.12 deg TVD:
6277.68 ft

S: 109 MD: 11010.00 ft Inc:
90.13 deg Az: 88.59 deg TVD:
6277.68 ft



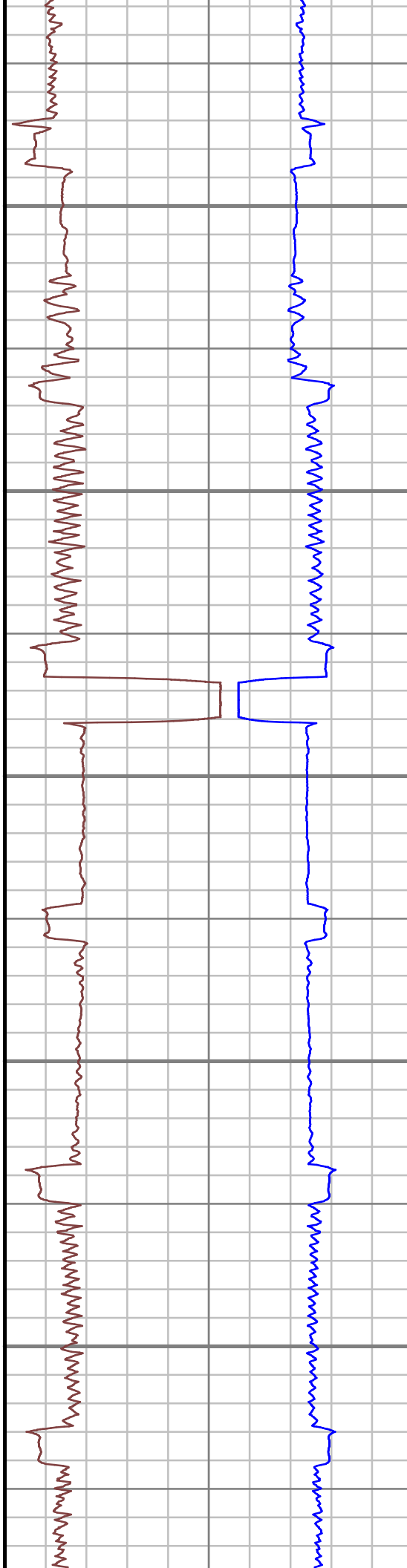
11100

11200

11300

11400

11500



S: 110 MD: 11101.00 ft Inc:
90.48 deg Az: 88.94 deg TVD:
6277.19 ft

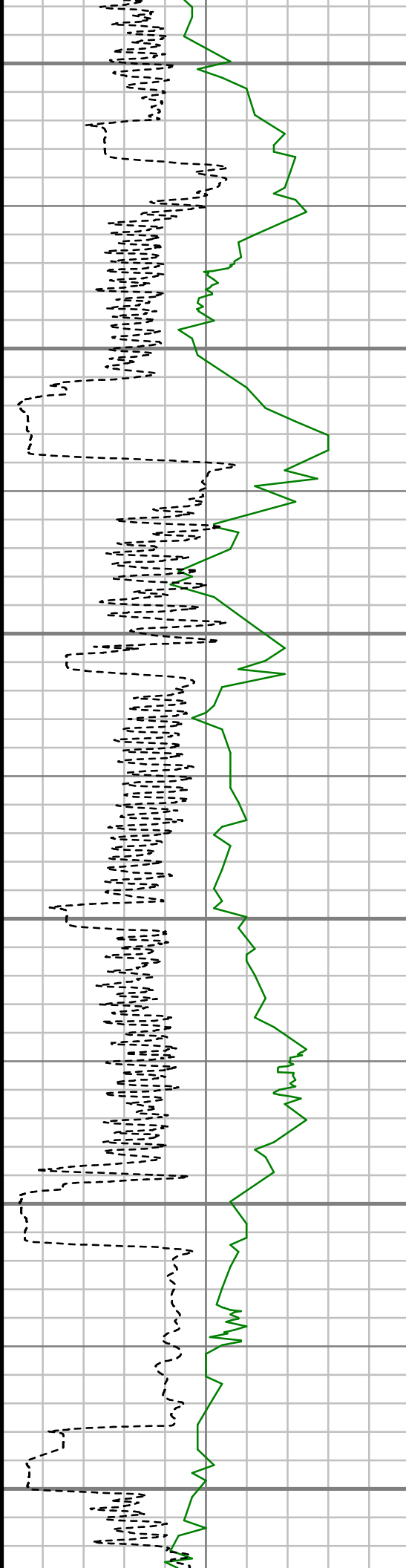
S: 111 MD: 11193.00 ft Inc:
91.19 deg Az: 89.21 deg TVD:
6275.85 ft

S: 112 MD: 11285.00 ft Inc:
89.78 deg Az: 89.38 deg TVD:
6275.08 ft

S: 113 MD: 11376.00 ft Inc:
89.96 deg Az: 89.65 deg TVD:
6275.29 ft

S: 114 MD: 11468.00 ft Inc:
89.96 deg Az: 90.26 deg TVD:
6275.36 ft

S: 115 MD: 11559.00 ft Inc:
89.96 deg Az: 89.82 deg TVD:
6275.43 ft



11600

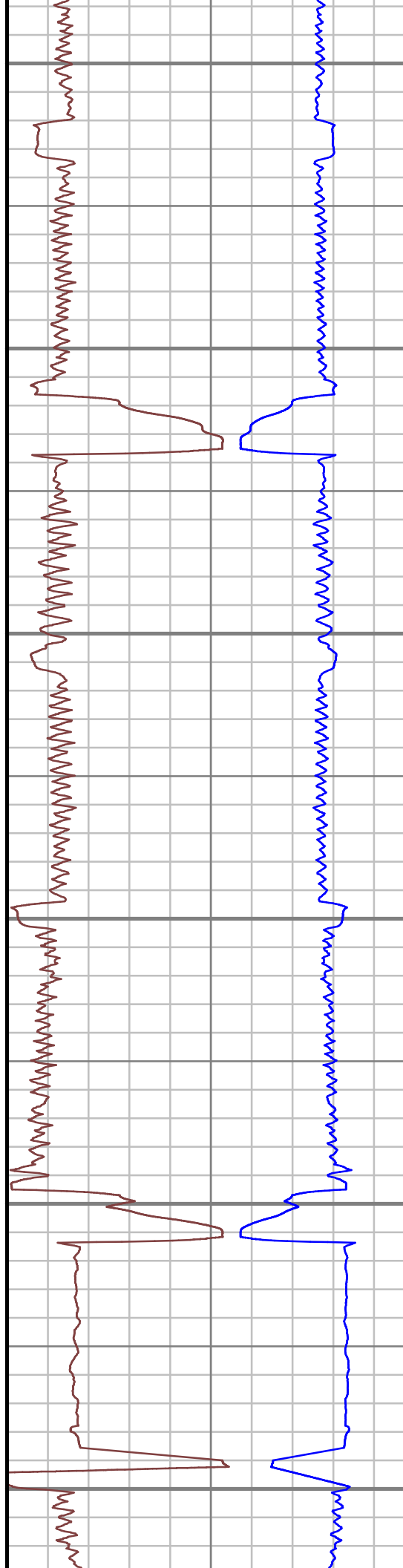
11700

11800

11900

12000

12100



S: 116 MD: 11651.00 ft Inc:
89.25 deg Az: 88.94 deg TVD:
6276.06 ft

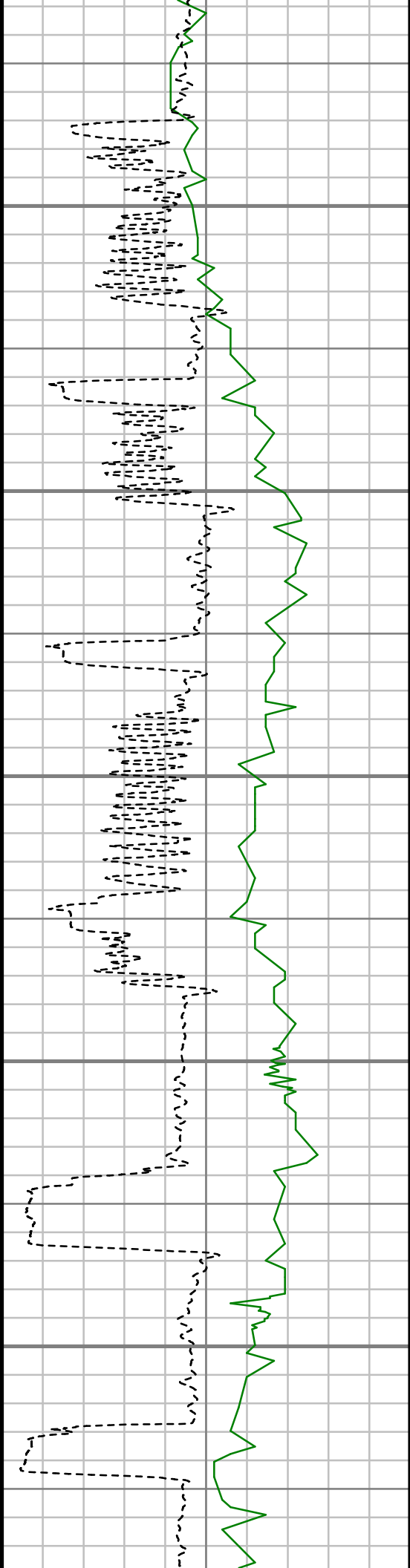
S: 117 MD: 11743.00 ft Inc:
90.92 deg Az: 89.73 deg TVD:
6275.92 ft

S: 118 MD: 11834.00 ft Inc:
90.92 deg Az: 89.56 deg TVD:
6274.45 ft

S: 119 MD: 11925.00 ft Inc:
91.45 deg Az: 89.03 deg TVD:
6272.57 ft

S: 120 MD: 12017.00 ft Inc:
91.10 deg Az: 89.47 deg TVD:
6270.52 ft

S: 121 MD: 12109.00 ft Inc:
90.22 deg Az: 91.58 deg TVD:
6269.46 ft



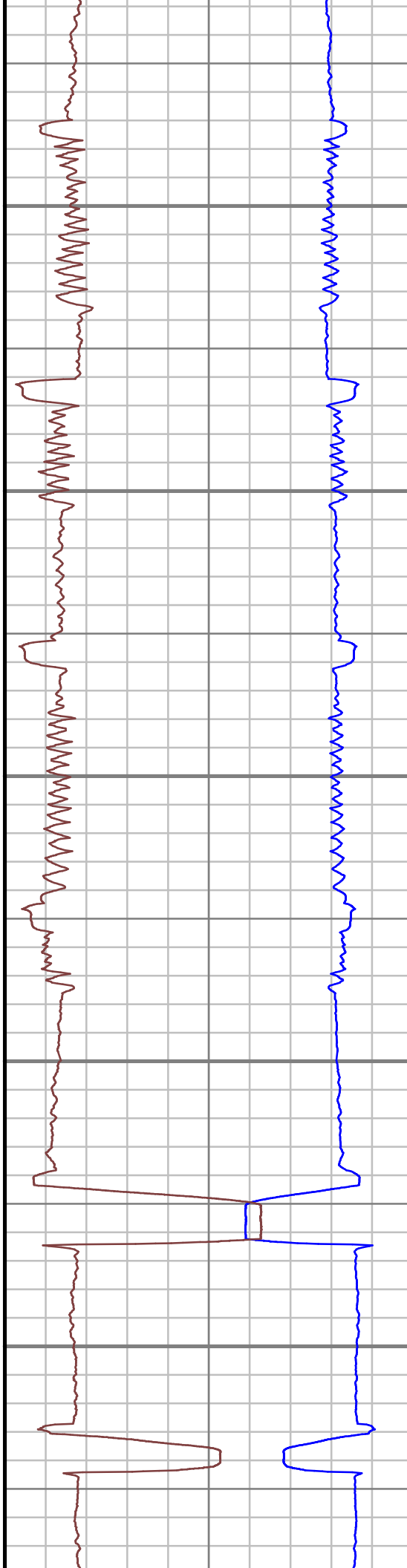
12200

12300

12400

12500

12600



S: 122 MD: 12201.00 ft Inc:
90.40 deg Az: 90.79 deg TVD:
6268.97 ft

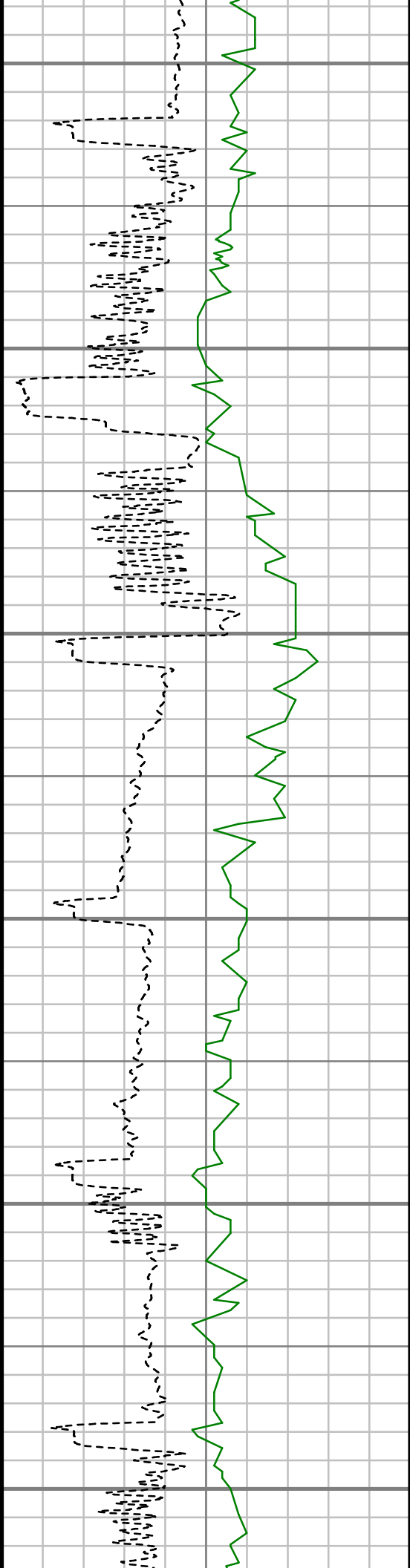
S: 123 MD: 12292.00 ft Inc:
89.96 deg Az: 90.70 deg TVD:
6268.69 ft

S: 124 MD: 12384.00 ft Inc:
90.66 deg Az: 90.35 deg TVD:
6268.19 ft

S: 125 MD: 12475.00 ft Inc:
91.36 deg Az: 90.88 deg TVD:
6266.59 ft

S: 126 MD: 12567.00 ft Inc:
91.36 deg Az: 89.73 deg TVD:
6264.40 ft

S: 127 MD: 12658.00 ft Inc:
90.40 deg Az: 90.61 deg TVD:
6263.00 ft



12700

12800

12900

13000

13100

13200



S: 128 MD: 12750.00 ft Inc:
91.10 deg Az: 90.44 deg TVD:
6261.80 ft

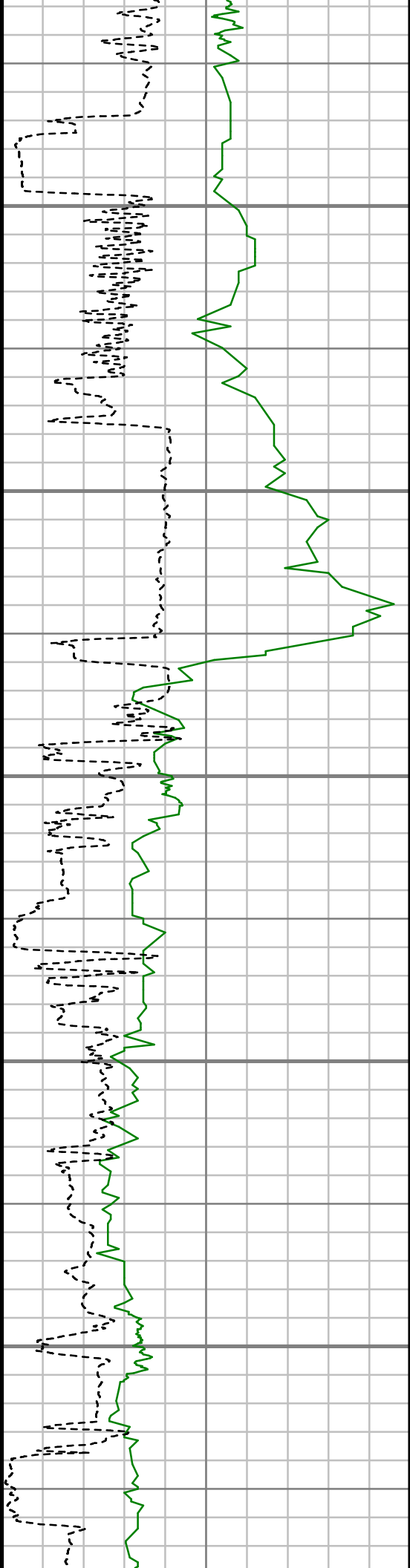
S: 129 MD: 12842.00 ft Inc:
89.78 deg Az: 89.38 deg TVD:
6261.10 ft

S: 130 MD: 12934.00 ft Inc:
90.04 deg Az: 88.68 deg TVD:
6261.24 ft

S: 131 MD: 13025.00 ft Inc:
90.40 deg Az: 89.12 deg TVD:
6260.89 ft

S: 132 MD: 13117.00 ft Inc:
90.57 deg Az: 89.03 deg TVD:
6260.11 ft

S: 133 MD: 13209.00 ft Inc:
91.19 deg Az: 90.44 deg TVD:
6258.70 ft



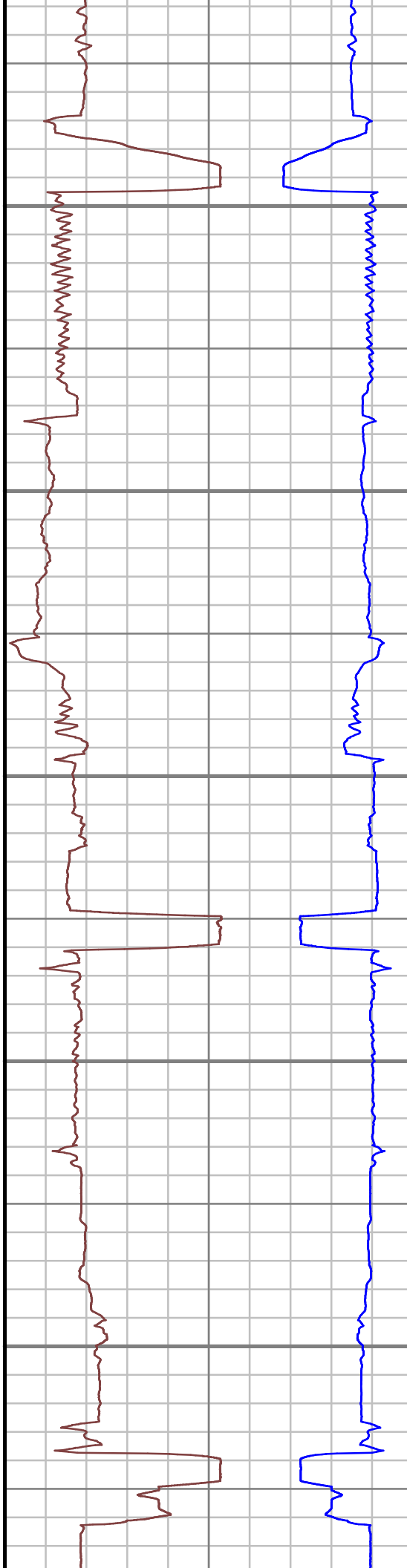
13300

13400

13500

13600

13700



S: 134 MD: 13300.00 ft Inc:
89.60 deg Az: 88.86 deg TVD:
6258.07 ft

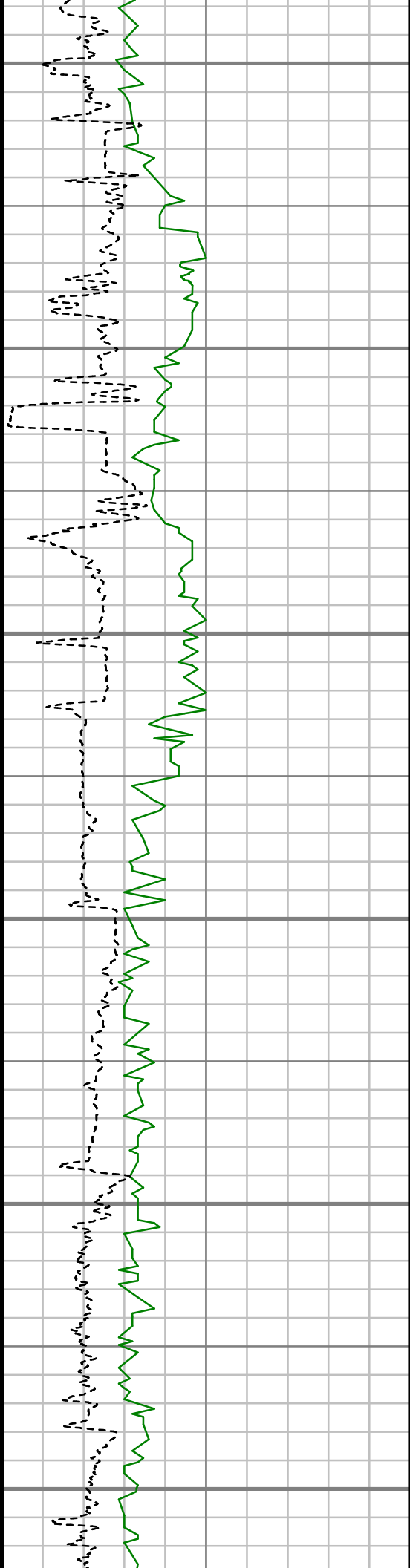
S: 135 MD: 13391.00 ft Inc:
89.60 deg Az: 89.73 deg TVD:
6258.70 ft

S: 136 MD: 13483.00 ft Inc:
89.16 deg Az: 89.30 deg TVD:
6259.69 ft

S: 137 MD: 13574.00 ft Inc:
89.60 deg Az: 88.59 deg TVD:
6260.67 ft

S: 138 MD: 13666.00 ft Inc:
89.43 deg Az: 87.63 deg TVD:
6261.44 ft

S: 139 MD: 13759.00 ft Inc:
90.13 deg Az: 88.42 deg TVD:
6261.80 ft



13800

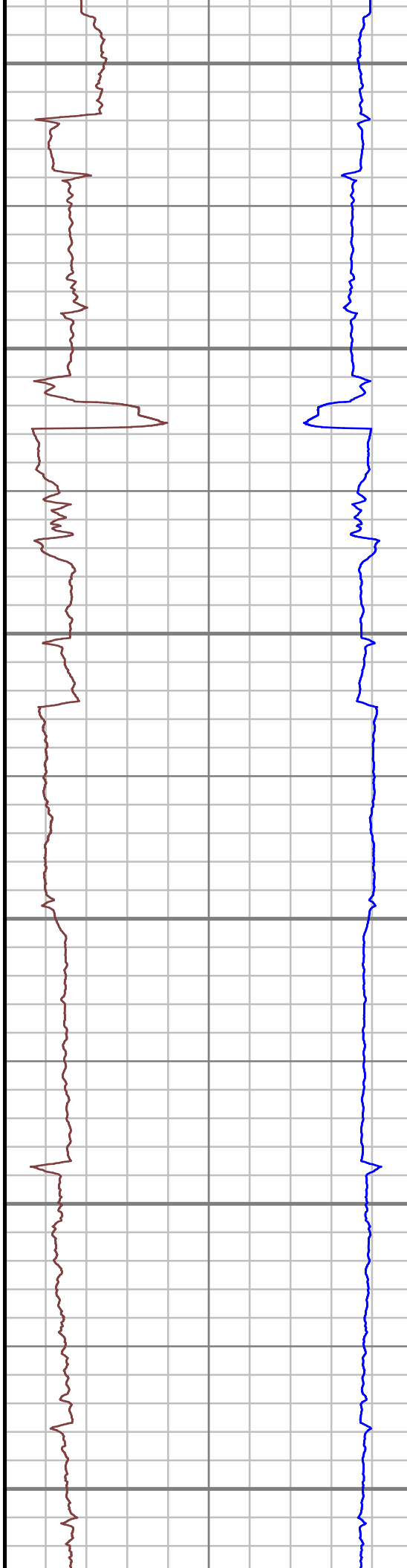
13900

14000

14100

14200

14300



S: 140 MD: 13850.00 ft Inc:
90.31 deg Az: 87.98 deg TVD:
6261.45 ft

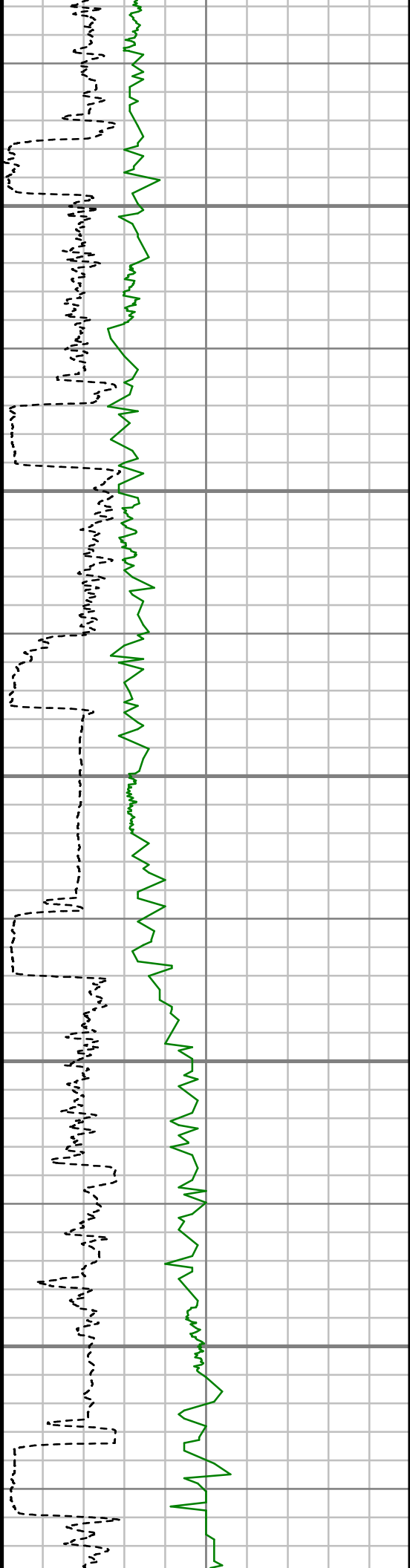
S: 141 MD: 13942.00 ft Inc:
91.80 deg Az: 88.42 deg TVD:
6259.76 ft

S: 142 MD: 14034.00 ft Inc:
91.89 deg Az: 88.06 deg TVD:
6256.79 ft

S: 143 MD: 14125.00 ft Inc:
91.45 deg Az: 87.80 deg TVD:
6254.14 ft

S: 144 MD: 14217.00 ft Inc:
91.01 deg Az: 88.06 deg TVD:
6252.16 ft

S: 145 MD: 14308.00 ft Inc:
90.92 deg Az: 86.48 deg TVD:
6250.63 ft



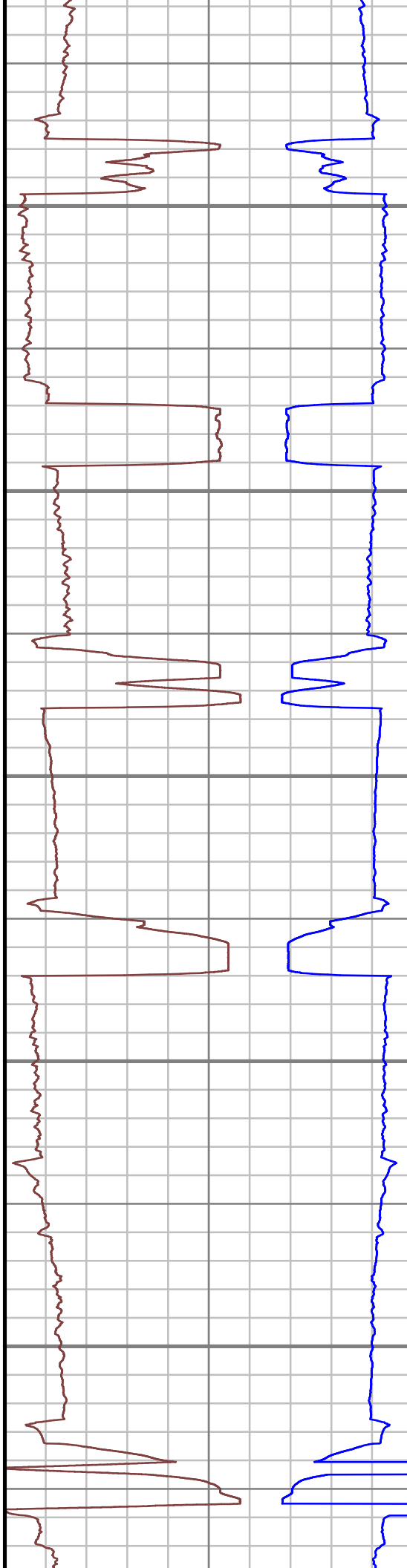
14400

14500

14600

14700

14800



S: 146 MD: 14399.00 ft Inc:
91.36 deg Az: 86.22 deg TVD:
6248.81 ft

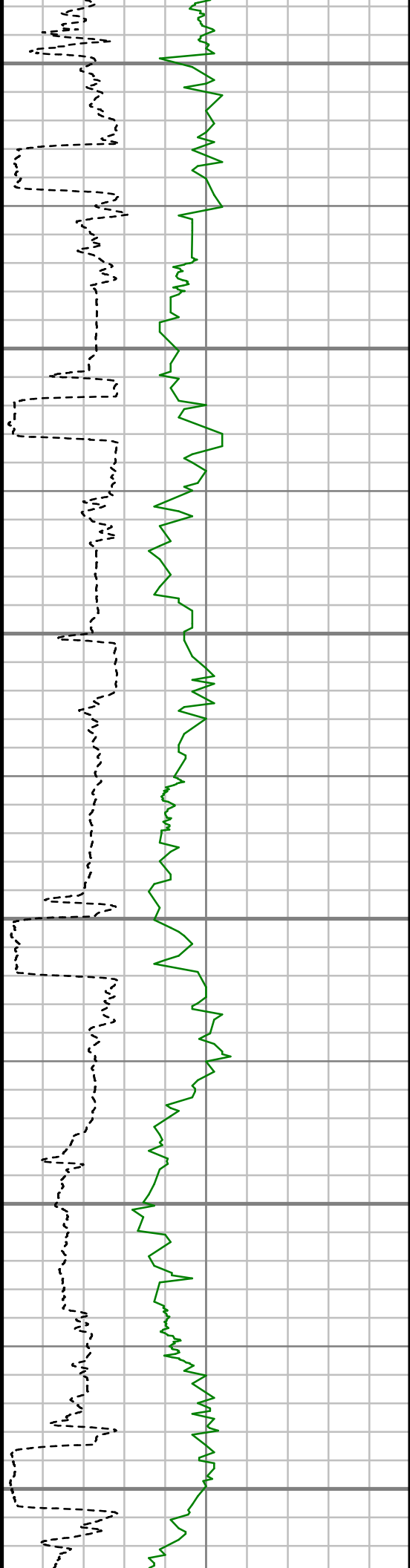
S: 147 MD: 14491.00 ft Inc:
90.48 deg Az: 87.98 deg TVD:
6247.33 ft

S: 148 MD: 14582.00 ft Inc:
91.01 deg Az: 88.50 deg TVD:
6246.14 ft

S: 149 MD: 14673.00 ft Inc:
91.71 deg Az: 90.70 deg TVD:
6243.98 ft

S: 150 MD: 14765.00 ft Inc:
91.10 deg Az: 88.24 deg TVD:
6241.72 ft

S: 151 MD: 14856.00 ft Inc:
91.54 deg Az: 89.91 deg TVD:
6239.62 ft



14900

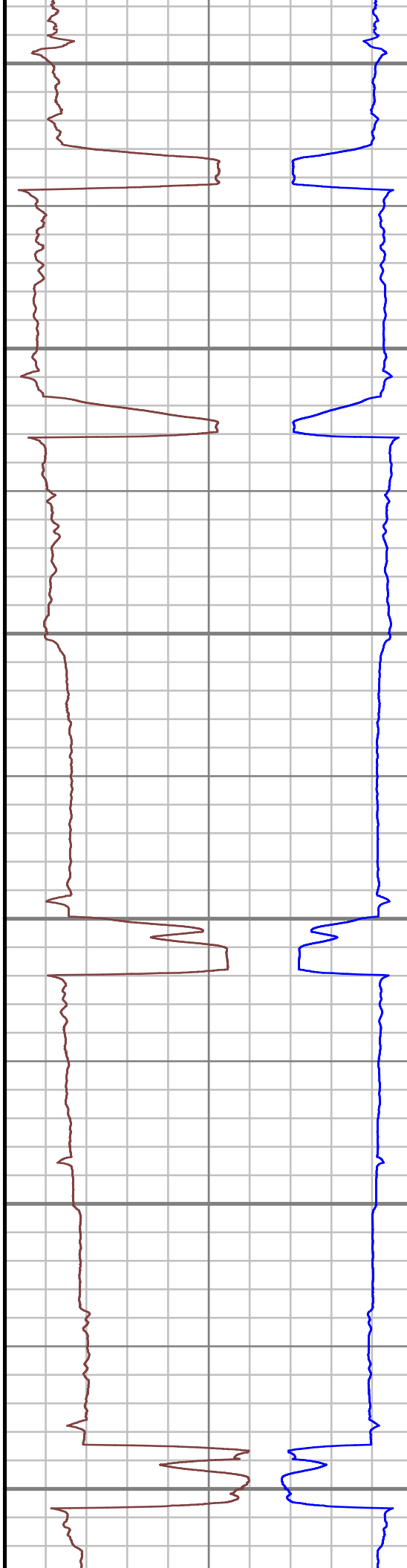
15000

15100

15200

15300

15400



S: 152 MD: 14948.00 ft Inc:
92.51 deg Az: 92.37 deg TVD:
6236.38 ft

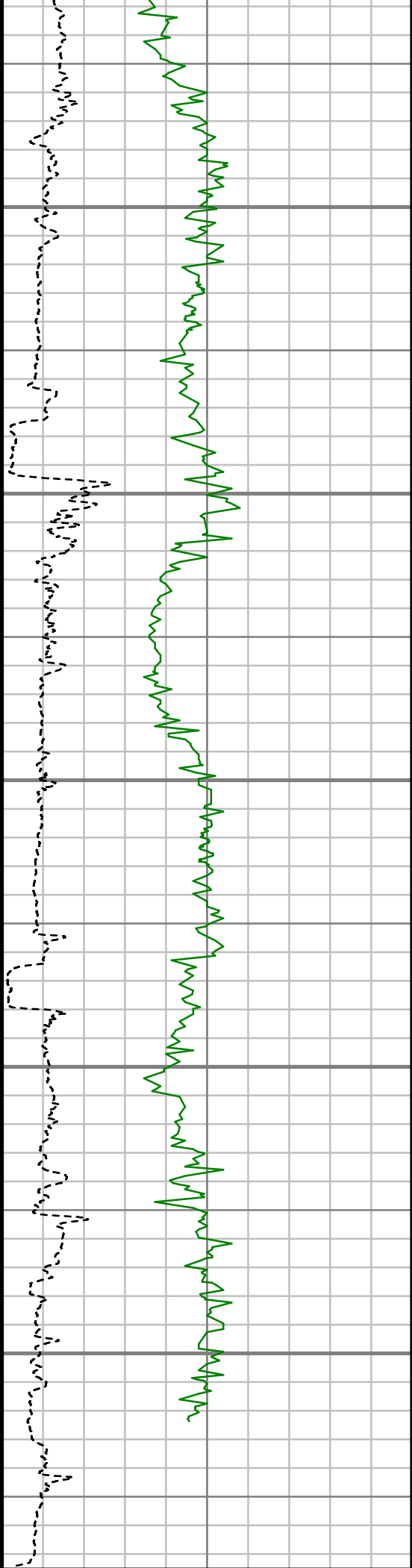
S: 153 MD: 15040.00 ft Inc:
90.31 deg Az: 92.37 deg TVD:
6234.12 ft

S: 154 MD: 15131.00 ft Inc:
90.66 deg Az: 93.60 deg TVD:
6233.35 ft

S: 155 MD: 15223.00 ft Inc:
89.25 deg Az: 91.05 deg TVD:
6233.42 ft

S: 156 MD: 15314.00 ft Inc:
90.48 deg Az: 92.02 deg TVD:
6233.63 ft

S: 157 MD: 15409.00 ft Inc:
89.52 deg Az: 91.32 deg TVD:
6233.63 ft



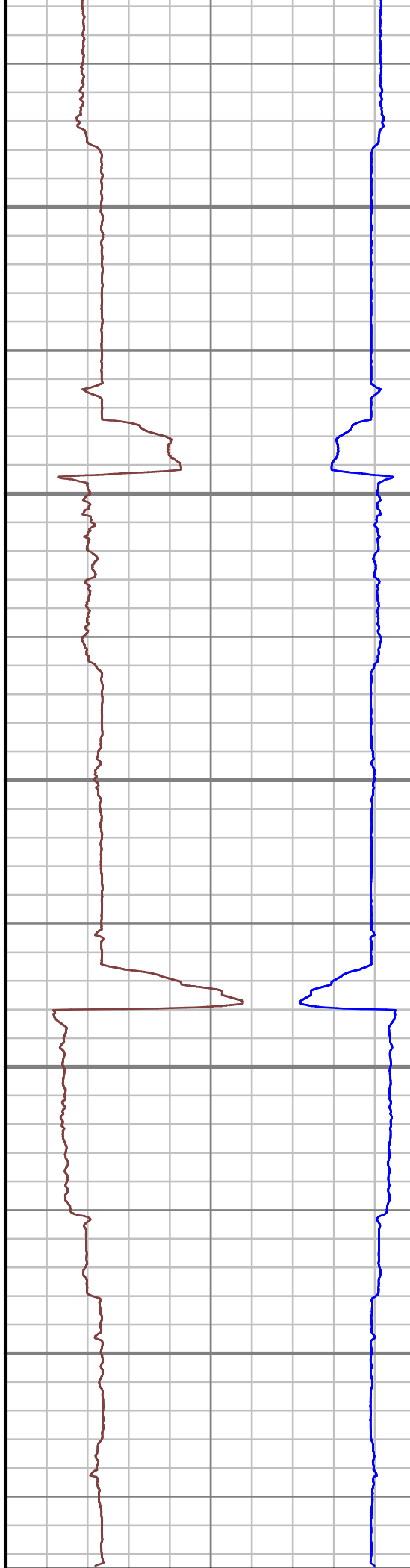
15500

15600

15700

15800

15900



S: 158 MD: 15504.00 ft Inc:
91.10 deg Az: 91.67 deg TVD:
6233.12 ft

S: 159 MD: 15598.00 ft Inc:
89.16 deg Az: 90.00 deg TVD:
6232.90 ft

S: 160 MD: 15693.00 ft Inc:
91.01 deg Az: 90.97 deg TVD:
6232.76 ft

S: 161 MD: 15789.00 ft Inc:
89.96 deg Az: 88.42 deg TVD:
6231.95 ft

S: 162 MD: 15883.00 ft Inc:
91.28 deg Az: 88.77 deg TVD:
6230.94 ft

S: 163 MD: 15914.00 ft Inc:
91.45 deg Az: 89.12 deg TVD:
6230.20 ft

Rate of Penetration (ROP)		
0	Unit = ft/hr	1000
Gamma Ray (GR)		
0	Unit = aapi	150

MEASURED DEPTH
1:600 (ft)

Weight-on-Bit (surf,max) (WOBX)			Comments
0	Unit = kip	100	
Hookload (max) (HKLX)			
0	Unit = kip	200	

MWD Survey Report

Well Location	ANSCHUTZ EQUUS FARMS 4-62-9_10 PAD
Well Name	ANSCHUTZ EQUUS FARMS 4-62-9-4956C2
Survey Date	12/14/2015
Latitude	40°19'20.831"N
Longitude	103°20'17.830"W
Btotal	52595 nT
Dip	66.97 deg
Magnetic Declination	8.26 deg
North Reference	True North
Grid Correction	None
Depth Reference	RKB (16.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 89.31Azim (deg)
Operator(s)	RYAN KLASSEN, ZACH BROWN

Well Notes

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
800.00	0.00	0.00	800.00	0.00	0.00	0.00	Invalid	Invalid
884.00	0.88	240.03	884.00	-0.56	-0.32	-0.56	1.05	84.00
976.00	2.11	247.85	975.96	-2.75	-1.31	-2.74	1.35	92.00
1068.00	3.25	246.71	1067.86	-6.74	-2.98	-6.71	1.24	92.00
1159.00	4.04	237.92	1158.68	-11.87	-5.71	-11.80	1.06	91.00
1251.00	5.28	229.66	1250.37	-17.89	-10.17	-17.77	1.52	92.00
1343.00	4.75	228.43	1342.02	-24.03	-15.44	-23.84	0.59	92.00
1434.00	5.63	224.56	1432.65	-30.04	-21.12	-29.79	1.04	91.00
1526.00	5.01	220.52	1524.25	-35.90	-27.39	-35.57	0.78	92.00
1617.00	4.48	218.41	1614.94	-40.76	-33.20	-40.36	0.61	91.00
1709.00	4.31	222.01	1706.67	-45.37	-38.58	-44.91	0.36	92.00
1801.00	3.34	207.95	1798.46	-49.00	-43.52	-48.48	1.46	92.00
1892.00	4.31	220.96	1889.26	-52.54	-48.44	-51.96	1.42	91.00
1983.00	4.66	223.24	1979.98	-57.38	-53.72	-56.74	0.43	91.00
2075.00	3.96	206.63	2071.73	-61.43	-59.28	-60.72	1.55	92.00
2167.00	3.61	226.23	2163.53	-65.00	-64.12	-64.23	1.45	92.00
2259.00	3.43	226.84	2255.36	-69.14	-68.00	-68.33	0.20	92.00
2350.00	5.10	236.07	2346.10	-74.53	-72.12	-73.67	1.98	91.00
2445.00	4.57	235.81	2440.76	-81.22	-76.61	-80.30	0.56	95.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft
2539.00	6.16	230.80	2534.35	-88.29	-81.90	-87.31	1.75	94.00
2633.00	6.86	228.69	2627.74	-96.49	-88.79	-95.43	0.79	94.00
2728.00	5.98	218.23	2722.15	-103.91	-96.42	-102.75	1.54	95.00
2822.00	5.45	213.40	2815.68	-109.49	-103.99	-108.24	0.76	94.00
2917.00	4.31	207.42	2910.34	-113.70	-110.93	-112.37	1.32	95.00
3012.00	3.96	224.47	3005.09	-117.70	-116.44	-116.31	1.34	95.00
3106.00	3.34	207.68	3098.90	-121.31	-121.18	-119.86	1.30	94.00
3201.00	3.69	215.24	3193.73	-124.42	-126.13	-122.91	0.61	95.00
3295.00	2.64	216.47	3287.58	-127.50	-130.34	-125.94	1.12	94.00
3390.00	3.87	220.43	3382.43	-130.93	-134.54	-129.32	1.32	95.00
3484.00	4.40	229.57	3476.18	-135.79	-139.29	-134.12	0.90	94.00
3578.00	5.10	231.77	3569.86	-141.87	-144.21	-140.14	0.77	94.00
3672.00	5.28	223.77	3663.48	-148.21	-149.92	-146.41	0.79	94.00
3766.00	5.01	218.41	3757.10	-153.82	-156.26	-151.95	0.58	94.00
3861.00	5.28	228.69	3851.72	-159.76	-162.39	-157.81	1.01	95.00
3955.00	3.78	224.30	3945.42	-165.23	-167.46	-163.22	1.63	94.00
4050.00	4.48	237.04	4040.18	-170.58	-171.73	-168.53	1.21	95.00
4144.00	3.52	244.77	4133.95	-176.31	-174.96	-174.22	1.18	94.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft
4239.00	4.66	250.05	4228.70	-182.61	-177.51	-180.48	1.27	95.00
4333.00	3.34	252.86	4322.47	-188.84	-179.63	-186.69	1.42	94.00
4428.00	4.04	242.31	4417.27	-194.48	-182.00	-192.31	1.03	95.00
4523.00	4.84	240.29	4511.99	-200.97	-185.54	-198.75	0.85	95.00
4617.00	5.28	231.41	4605.62	-207.85	-190.20	-205.57	0.95	94.00
4711.00	5.28	222.19	4699.23	-214.20	-196.10	-211.85	0.90	94.00
4806.00	4.31	212.25	4793.90	-219.11	-202.35	-216.69	1.34	95.00
4900.00	3.34	215.42	4887.69	-222.65	-207.57	-220.16	1.05	94.00
4994.00	2.37	203.55	4981.57	-225.06	-211.59	-222.53	1.20	94.00
5088.00	2.11	196.79	5075.50	-226.38	-215.03	-223.80	0.40	94.00
5183.00	1.67	196.43	5170.44	-227.31	-218.03	-224.70	0.46	95.00
5278.00	0.70	119.88	5265.43	-227.22	-219.65	-224.59	1.74	95.00
5372.00	0.70	142.38	5359.42	-226.37	-220.40	-223.74	0.29	94.00
5467.00	0.62	152.14	5454.41	-225.79	-221.31	-223.14	0.15	95.00
5561.00	0.18	145.02	5548.41	-225.48	-221.87	-222.82	0.47	94.00
5656.00	0.44	179.65	5643.41	-225.40	-222.36	-222.74	0.33	95.00
5750.00	0.26	189.93	5737.41	-225.44	-222.93	-222.77	0.20	94.00
5845.00	2.81	88.50	5832.37	-223.15	-223.09	-220.48	3.03	95.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
5940.00	11.78	89.03	5926.51	-211.09	-222.86	-208.42	9.44	95.00
6035.00	21.63	81.91	6017.39	-183.96	-220.23	-181.32	10.57	95.00
6129.00	32.45	84.81	6101.00	-141.51	-215.50	-138.92	11.59	94.00
6224.00	42.30	85.96	6176.40	-84.05	-210.93	-81.52	10.39	95.00
6319.00	55.05	88.68	6239.02	-12.91	-207.76	-10.41	13.59	95.00
6413.00	72.63	89.91	6280.30	71.13	-206.80	73.63	18.75	94.00
6507.00	84.06	92.37	6299.25	162.98	-208.67	165.51	12.43	94.00
6567.00	85.30	92.28	6304.81	222.64	-211.09	225.20	2.06	60.00
6693.00	90.75	92.20	6309.16	348.35	-216.01	350.98	4.33	126.00
6788.00	91.10	91.93	6307.63	443.23	-219.43	445.91	0.46	95.00
6883.00	91.63	90.09	6305.37	538.16	-221.10	540.86	2.02	95.00
6977.00	91.01	90.09	6303.21	632.13	-221.24	634.84	0.65	94.00
7071.00	90.22	89.65	6302.20	726.11	-221.03	728.83	0.96	94.00
7166.00	90.84	90.00	6301.32	821.11	-220.73	823.82	0.75	95.00
7260.00	89.34	88.24	6301.18	915.10	-219.29	917.81	2.45	94.00
7355.00	89.69	88.15	6301.98	1010.08	-216.30	1012.76	0.38	95.00
7449.00	90.22	88.50	6302.05	1104.06	-213.56	1106.72	0.67	94.00
7544.00	90.13	88.15	6301.76	1199.05	-210.78	1201.67	0.38	95.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
7638.00	90.75	89.03	6301.04	1293.04	-208.47	1295.64	1.14	94.00
7732.00	91.28	88.77	6299.38	1387.02	-206.67	1389.61	0.63	94.00
7827.00	89.60	88.15	6298.65	1482.00	-204.12	1484.57	1.87	95.00
7920.00	90.22	88.59	6298.80	1574.99	-201.48	1577.53	0.81	93.00
8015.00	90.04	88.33	6298.58	1669.98	-198.92	1672.50	0.33	95.00
8110.00	90.40	89.21	6298.21	1764.97	-196.88	1767.47	1.00	95.00
8204.00	90.04	88.86	6297.85	1858.97	-195.29	1861.46	0.53	94.00
8298.00	90.66	89.03	6297.27	1952.97	-193.56	1955.44	0.68	94.00
8393.00	90.04	87.89	6296.69	2047.95	-191.00	2050.40	1.37	95.00
8486.00	89.87	88.24	6296.76	2140.93	-187.86	2143.35	0.42	93.00
8580.00	90.40	89.65	6296.55	2234.93	-186.13	2237.33	1.60	94.00
8675.00	91.45	90.61	6295.02	2329.90	-186.35	2332.31	1.51	95.00
8769.00	92.07	91.32	6292.13	2423.82	-187.93	2426.26	0.99	94.00
8864.00	90.40	91.32	6290.09	2518.73	-190.11	2521.20	1.76	95.00
8958.00	91.28	91.93	6288.72	2612.64	-192.78	2615.16	1.14	94.00
9052.00	91.10	90.09	6286.77	2706.58	-194.43	2709.12	1.97	94.00
9147.00	90.48	89.38	6285.46	2801.57	-193.99	2804.11	0.98	95.00
9243.00	89.69	89.03	6285.31	2897.57	-192.66	2900.10	0.90	96.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
9337.00	90.22	89.21	6285.38	2991.56	-191.22	2994.08	0.59	94.00
9431.00	88.99	88.50	6286.03	3085.56	-189.34	3088.06	1.51	94.00
9525.00	88.99	88.68	6287.69	3179.53	-187.03	3182.02	0.19	94.00
9620.00	90.31	88.06	6288.28	3274.52	-184.33	3276.97	1.53	95.00
9715.00	90.75	88.94	6287.40	3369.50	-181.85	3371.94	1.03	95.00
9810.00	90.75	88.77	6286.16	3464.49	-179.96	3466.91	0.19	95.00
9904.00	91.01	88.50	6284.72	3558.47	-177.72	3560.87	0.40	94.00
9998.00	90.22	87.36	6283.71	3652.44	-174.33	3654.80	1.48	94.00
10093.00	89.60	86.66	6283.86	3747.36	-169.37	3749.67	0.98	95.00
10185.00	90.84	90.26	6283.50	3839.33	-166.90	3841.62	4.14	92.00
10276.00	90.75	89.91	6282.25	3930.32	-167.04	3932.61	0.40	91.00
10368.00	89.69	88.86	6281.89	4022.31	-166.05	4024.60	1.62	92.00
10460.00	90.66	88.77	6281.61	4114.31	-164.14	4116.58	1.06	92.00
10551.00	90.48	88.15	6280.70	4205.29	-161.69	4207.55	0.70	91.00
10643.00	90.66	87.80	6279.78	4297.26	-158.45	4299.48	0.43	92.00
10734.00	91.19	88.33	6278.32	4388.23	-155.37	4390.42	0.82	91.00
10826.00	89.87	88.50	6277.47	4480.21	-152.83	4482.38	1.45	92.00
10918.00	89.87	89.12	6277.68	4572.21	-150.92	4574.36	0.67	92.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
11010.00	90.13	88.59	6277.68	4664.20	-149.09	4666.34	0.64	92.00
11101.00	90.48	88.94	6277.19	4755.20	-147.13	4757.32	0.55	91.00
11193.00	91.19	89.21	6275.85	4847.19	-145.64	4849.29	0.82	92.00
11285.00	89.78	89.38	6275.08	4939.18	-144.51	4941.28	1.54	92.00
11376.00	89.96	89.65	6275.29	5030.18	-143.74	5032.28	0.35	91.00
11468.00	89.96	90.26	6275.36	5122.18	-143.67	5124.28	0.67	92.00
11559.00	89.96	89.82	6275.43	5213.17	-143.74	5215.28	0.48	91.00
11651.00	89.25	88.94	6276.06	5305.16	-142.75	5307.27	1.22	92.00
11743.00	90.92	89.73	6275.92	5397.16	-141.68	5399.26	2.01	92.00
11834.00	90.92	89.56	6274.45	5488.15	-141.12	5490.24	0.19	91.00
11925.00	91.45	89.03	6272.57	5579.13	-140.00	5581.22	0.82	91.00
12017.00	91.10	89.47	6270.52	5671.10	-138.80	5673.19	0.61	92.00
12109.00	90.22	91.58	6269.46	5763.07	-139.65	5765.17	2.48	92.00
12201.00	90.40	90.79	6268.97	5855.02	-141.55	5857.15	0.88	92.00
12292.00	89.96	90.70	6268.69	5945.99	-142.73	5948.14	0.49	91.00
12384.00	90.66	90.35	6268.19	6037.97	-143.58	6040.13	0.85	92.00
12475.00	91.36	90.88	6266.59	6128.93	-144.55	6131.11	0.97	91.00
12567.00	91.36	89.73	6264.40	6220.89	-145.04	6223.08	1.24	92.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
12658.00	90.40	90.61	6263.00	6311.86	-145.32	6314.07	1.44	91.00
12750.00	91.10	90.44	6261.80	6403.83	-146.16	6406.06	0.79	92.00
12842.00	89.78	89.38	6261.10	6495.82	-146.02	6498.05	1.84	92.00
12934.00	90.04	88.68	6261.24	6587.82	-144.46	6590.04	0.82	92.00
13025.00	90.40	89.12	6260.89	6678.82	-142.72	6681.02	0.62	91.00
13117.00	90.57	89.03	6260.11	6770.81	-141.23	6773.01	0.21	92.00
13209.00	91.19	90.44	6258.70	6862.80	-140.80	6864.99	1.67	92.00
13300.00	89.60	88.86	6258.07	6953.79	-140.24	6955.98	2.46	91.00
13391.00	89.60	89.73	6258.70	7044.79	-139.12	7046.97	0.97	91.00
13483.00	89.16	89.30	6259.69	7136.78	-138.35	7138.96	0.68	92.00
13574.00	89.60	88.59	6260.67	7227.77	-136.67	7229.94	0.91	91.00
13666.00	89.43	87.63	6261.44	7319.75	-133.63	7321.89	1.07	92.00
13759.00	90.13	88.42	6261.80	7412.72	-130.42	7414.83	1.14	93.00
13850.00	90.31	87.98	6261.45	7503.70	-127.56	7505.78	0.52	91.00
13942.00	91.80	88.42	6259.76	7595.67	-124.66	7597.72	1.69	92.00
14034.00	91.89	88.06	6256.79	7687.60	-121.84	7689.63	0.39	92.00
14125.00	91.45	87.80	6254.14	7778.54	-118.56	7780.53	0.56	91.00
14217.00	91.01	88.06	6252.16	7870.49	-115.24	7872.45	0.56	92.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
14308.00	90.92	86.48	6250.63	7961.42	-110.91	7963.33	1.74	91.00
14399.00	91.36	86.22	6248.81	8052.28	-105.12	8054.13	0.56	91.00
14491.00	90.48	87.98	6247.33	8144.19	-100.46	8145.99	2.14	92.00
14582.00	91.01	88.50	6246.14	8235.17	-97.67	8236.94	0.82	91.00
14673.00	91.71	90.70	6243.98	8326.13	-97.04	8327.91	2.53	91.00
14765.00	91.10	88.24	6241.72	8418.10	-96.19	8419.87	2.76	92.00
14856.00	91.54	89.91	6239.62	8509.07	-94.72	8510.83	1.90	91.00
14948.00	92.51	92.37	6236.38	8600.96	-96.55	8602.74	2.87	92.00
15040.00	90.31	92.37	6234.12	8692.79	-100.36	8694.63	2.39	92.00
15131.00	90.66	93.60	6233.35	8783.60	-105.10	8785.50	1.41	91.00
15223.00	89.25	91.05	6233.42	8875.46	-108.83	8877.42	3.16	92.00
15314.00	90.48	92.02	6233.63	8966.39	-111.27	8968.38	1.72	91.00
15409.00	89.52	91.32	6233.63	9061.31	-114.04	9063.34	1.26	95.00
15504.00	91.10	91.67	6233.12	9156.24	-116.51	9158.30	1.71	95.00
15598.00	89.16	90.00	6232.90	9250.19	-117.88	9252.29	2.72	94.00
15693.00	91.01	90.97	6232.76	9345.17	-118.68	9347.28	2.19	95.00
15789.00	89.96	88.42	6231.95	9441.15	-118.16	9443.26	2.87	96.00
15883.00	91.28	88.77	6230.94	9535.14	-115.85	9537.23	1.45	94.00
15914.00	91.45	89.12	6230.20	9566.13	-115.28	9568.21	1.27	31.00

2" = 100' FEET MD